

09/16/2005

ENSR Consulting & Engineering - NJ 20 New England Ave Piscataway, NJ 08854

Attention: Mr. Greg Micalizio

STL Edison 777 New Durham Road Edison, NJ 08817

Tel 732 549 3900 Fax 732 549 3679 www.stl-inc.com

Laboratory Results Job No. E050 - Phillipsburg

Dear Mr. Micalizio:

Enclosed are the results you requested for the following sample(s) received at our laboratory on August 17, 2005.

<u>Lab No.</u>	Client ID	Analysis Required
661886	F081605	PP VOA+10
661887	MW6A	PP VOA+10
661888	MW6B	PP VOA+10
661889	T081605	PP VOA+10
661890	F081705	PP VOA+10
661891	MW37A	PP VOA+10
661892	MW37C	PP VOA+10

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, David Lissy, at (732) 549-3900.

Very Truly Yours,

Michael S. Uben

Michael J. Urban Laboratory Manager



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Analytical Results Summary

Client ID: F081605 Site: Phillipsburg

Lab Sample No: 661886 Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05 GC Column: DB624

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83245.d

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethene trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene	Units: ug/l ND ND ND ND ND ND ND ND ND N	•
Chlorobenzene Ethylbenzene Xylene (Total)	ND ND ND ND	0.4 0.4 0.5 0.4

Client ID: F081605 Site: Phillipsburg

Lab Sample No: 661886 Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83245.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND	= = = = = -		===
2	_		
5.	_		
7.			
8. 9.	-		
1. 2. 3.	-		
4.	_		
6.			
7.			
9.	- -		
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6.			
B	-		
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TOTAL ESTIMATED CONCENTRATION

E050 STL Edison

0.0

Client ID: MW6A Lab Sample No: 661887

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83246.d

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane	ND	0.3
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.2
Methylene Chloride	1.5	0.5
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	2.8	0.4
1,1-Dichloroethane	11	0.3
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
Chloroform	ND	0.5
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	39	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane	ND ND 4.4	0.3 0.2 0.4
1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene	ND ND ND	0.3 0.3 0.3
2-Chloroethyl Vinyl Ether	ND	0.2
Bromoform	ND	0.4
Tetrachloroethene	ND	0.2
1,1,2,2-Tetrachloroethane Toluene Chlorobenzene	1.0 ND 0.6	0.4 0.3 0.4
Ethylbenzene Xylene (Total)	ND ND ND	0.4 0.5 0.4

Client ID: MW6A Site: Phillipsburg

Lab Sample No: 661887

Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83246.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND	= ===== 	=========	===:
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TOTAL ESTIMATED CONCENTRATION

0.0

Client ID: MW6B Lab Sample No: 661888

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER
Date Received: 08/17/05 Level: LOW
Date Analyzed: 08/24/05 Purge Volume:

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v83247.d

<u>Parameter</u>	Analytical Result Units: uq/l	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane 2,1,1-Trichloroethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane	ND ND ND ND 0.6 1.3 1.6 ND	0.3 0.3 0.2 0.5 0.2 0.4 0.3 0.4 0.5 0.3 0.3 0.3 0.3 0.2 0.4 0.3
Toluene Chlorobenzene Ethylbenzene Xylene (Total)	ND ND ND ND ND	0.3 0.4 0.4 0.5 0.4

Client ID: MW6B Site: Phillipsburg

Lab Sample No: 661888

Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83247.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
 Fluorodichloromethane 2. 	4.06	3.4	
4.			
5. 6. 7. 8.			
9.			
10. 11. 12. 13.			
14.			
15. 16. 17.			
19.			
21.			
23. 24.			
26.			
28.			
29. 30.			

TOTAL ESTIMATED CONCENTRATION 3.4

Client ID: T081605 Lab Sample No: 661889

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER
Date Received: 08/17/05 Level: LOW

Lab File ID: v83248.d

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

GC Column: DB624 Dilution Factor: 1.0 Instrument ID: VOAMS7.i

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane	ND	0.3
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.2
Methylene Chloride	ND	0.5
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene Chloroform	ND	0.4
1,2-Dichloroethane	ND	0.5
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.2
Dibromochloromethane	ND	0.4
1,1,2-Trichloroethane	ND ND	0.3
Benzene	ND ND	0.3
trans-1,3-Dichloropropene	ND ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.2
Bromoform	ND	0.4 0.2
Tetrachloroethene	ND	0.4
1,1,2,2-Tetrachloroethane	ND	0.4
Toluene	ND	0.3
Chlorobenzene	ND	0.4
Ethylbenzene	ND	0.4
Xylene (Total)	ND	0.4

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Client ID: T081605 Lab Sample No: 661889

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER
Date Received: 08/17/05 Level: LOW
Date Analyzed: 08/24/05 Purge Volume:

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83248.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND	=======	=======================================	===
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TOTAL ESTIMATED CONCENTRATION

0.0

Client ID: F081705 Lab Sample No: 661890

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/17/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83249.d

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane	ND	0.3
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.2
Methylene Chloride	ND	0.5
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
Chloroform	ND	0.5
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3
cis-1,3-Dichloropropene Trichloroethene	ND	0.2
Dibromochloromethane	ND	0.4
1,1,2-Trichloroethane	ND	0.3
Benzene	ND	0.3
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.2
Bromoform	ND	0.4
Tetrachloroethene	ND	0.2
1,1,2,2-Tetrachloroethane	ND	0.4
Toluene	ND	0.3
Chlorobenzene	ND	0.4
Ethylbenzene	ND	0.4
Xylene (Total)	ND	0.5
_ , , _ ,	ND	0.4

Client ID: F081705 Site: Phillipsburg

Lab Sample No: 661890

Lab Job No: E050

Date Sampled: 08/17/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83249.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	~
1. NO VOLATILE ORGANIC COMPOUNDS FOUND			
2	-		
4			
5. 6.	-		
/ •			
9.	-		
10.			
12.	-		
14. 15. 16.	- [
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24.			
25.	-		
26. 27.	-		
28			
30.	-		

TOTAL	ESTIMATED	CONCENTRATION	0.0

11

Client ID: MW37A Lab Sample No: 661891

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/17/05 Matrix: WATER
Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

GC Column: DB624 Instrument ID: VOAMS7.i Lab File ID: v83250.d

<u>Parameter</u>	Analytical Result <u>Units: uq/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.3
Methylene Chloride	ND	0.2
Trichlorofluoromethane	ND	0.5
1,1-Dichloroethene	ND	0.2
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	0.4
Chloroform	ND ·	0.4
1,2-Dichloroethane	ND	0.5
1,1,1-Trichloroethane	ND ND	0.3
Carbon Tetrachloride	0.6	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3 0.3
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	6.4	0.4
Dibromochloromethane	ND	0.3
1,1,2-Trichloroethane	ND	0.3
Benzene	ND	0.3
trans-1,3-Dichloropropene	ND	0.2
2-Chloroethyl Vinyl Ether	ND	0.4
Bromoform	ND	0.2
Tetrachloroethene	ND	0.4
1,1,2,2-Tetrachloroethane Toluene	ND	0.3
Chlorobenzene	1.0	0.4
Ethylbenzene	ND	0.4
Xylene (Total)	ND 	0.5
1 (10001)	ND	0.4

Client ID: MW37A Site: Phillipsburg

Lab Sample No: 661891

Lab Job No: E050

Date Sampled: 08/17/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83250.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1. C6H12 Cycloalkane 2.	6.74	4.6	
4			
7.			
8. 9. 10. 11.			
12. 13.			
14. 15. 16.			
18.			
20. 21.			
23			
25. 26. 27.			
28. 29.			
30.			

TOTAL ESTIMATED CONCENTRATION 4.6

13

Client ID: MW37C Lab Sample No: 661892

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/17/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83251.d

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene	ND N	0.3 0.3 0.3 0.2 0.5 0.2 0.4 0.3 0.4 0.5 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
Ethylbenzene Xylene (Total)	ND ND	0.4 0.5 0.4

Client ID: MW37C Site: Phillipsburg

Lab Sample No: 661892 Lab Job No: E050

Date Sampled: 08/17/05
Date Received: 08/17/05

Matrix: WATER Level: LOW

Date Analyzed: 08/24/05

Purge Volume: 5.0 ml Dilution Factor: 1.0

GC Column: DB624

Instrument ID: VOAMS7.i
Lab File ID: v83251.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND	======		====
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TOTAL ESTIMATED CONCENTRATION 0.0

General Information

Chain of Custody

Edison, New Jersey 08817 Phone: (732) 549-3900 Fax: (732) 549-3679 777 New Durham Road

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)		-5 L5X
CAS CONTRACTOR OF THE PARTY OF	Samplers Name (Printed)	Site/Project Identification
Company		
	からするとかがん	State (Location of site): NJ: X / NY: Other:
Address		Regulatory Program:
STATE OF STA	Tharound Time	ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)
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TOROXO SU	S A A	
Phone 722-991-775 (981-711)	1 Week	The state of the s
	Other	
Sample Identification Date	No. 05	e c c c c c c c c c c c c c c c c c c c
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	X 7 7 0 7 X	288 199
146A 8 405	11:50 6W 3 X	887
MWOD	X 80353	888
50/0/02	1 BB 2 X	588
1081105	10:15 AO 2 X	890
MW37A SINIOS	1115 GW 3 X	200
MW 3 + 50 8/17/6	13:35 (JW 3 X	892
Preservation Used: $1 = ICE$, $2 = HCI$, $3 = H_2SO_4$, $4 = HNO_3$,	5 = NaOH Soil: 12	
6 = Other , 7 = Other		

Water Metals Filtered (Yes/No)? Company Company Company Company Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Received by Received by Received by (V 8 18-17-05 18:00 Date / Time Date / Time Date / Time Company Company Company Company Special Instructions Relinquished by Relinquished by Relinquished by Relinquished by

Phode Island (132).

Connecticut (PH-0200),

STL-6003

Laboratory Chronicles

INTERNAL CUSTODY RECORD AND LABORATORY CHRONICLE STL Edison

777 New Durham Road, Edison, New Jersey 08817

Job No:	E050	Site:	Phillipsburg
Client:	ENSR Consulting & Engineering - NJ		

VOAMS

WATER - 624

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
661886	8/16/2005	8/17/2005	- <u></u> ·-		8/24/2005	Moroney, Christopher	9297
661887	8/16/2005	8/17/2005	- <u></u> ·-		8/24/2005	Moroney, Christopher	9297
661888	8/16/2005	8/17/2005	- <u></u> ·-		8/24/2005	Moroney, Christopher	9297
661889	8/16/2005	8/17/2005			8/24/2005	Moroney, Christopher	9297
661890	8/17/2005	8/17/2005			8/24/2005	Moroney, Christopher	9297
661891	8/17/2005	8/17/2005			8/24/2005	Moroney, Christopher	9297
661892	8/17/2005	8/17/2005			8/24/2005	Moroney, Christopher	9297
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Methodology Review

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2 Rev 4.1. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method -200.7/SW846~6010B and for solid matrix -6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1/7470A and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

<u>Element</u>	Water Test Method <u>Furnace</u>	Solid Test Method Furnace
Antimony	200.9	7041
Arsenic	200.9	7060A
Cadmium	200.9	7131A
Lead	200.9	7421
Selenium	200.9	7740
Thallium	200.9	7841

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in water and solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020A

Corrosivity - Water pH Method 9040B Soil pH Method 9045C

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release

Toxicity - TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

Data Reporting Qualifiers

DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
 - J Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.
 - B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
 - P For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
 - * For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

Non-Conformance Summary



Nonconformance Summary

STL Edison Job Number: <u>E050</u>

Client: ENSR Consulting & Engineering - NJ

Date: 9/2/2005

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael J.Urban Laboratory Manager

Michael S. Ubox

GC/MS Forms and Data (Volatiles)

Results Summary and Chromatograms

Client ID: **F081605** Lab Sample No: 661886

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Instrument ID: VOAMS7.i Dilution Factor: 1.0

Lab File ID: v83245.d

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.3
Methylene Chloride	ND	0.2
Trichlorofluoromethane	ND ND	0.5
1,1-Dichloroethene	ND ND	0.2
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	0.4
Chloroform	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3
cis-1,3-Dichloropropene Trichloroethene	ND	0.2
Dibromochloromethane	ND	0.4
1,1,2-Trichloroethane	ND	0.3
Benzene	ND	0.3
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.2
Bromoform	ND	0.4
Tetrachloroethene	ND	0.2
1,1,2,2-Tetrachloroethane	ND ND	0.4
Toluene	ND	0.3
Chlorobenzene	ND ND	0.4
Ethylbenzene	ND	0.4 0.5
Xylene (Total)	ND	0.4
		V

Client ID: **F081605** Site: Phillipsburg

Lab Sample No: 661886 Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83245.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1NO VOLATILE ORGANIC COMPOUNDS FOUND	=======	========	====
2 COMPOUNDS FOUND			
2			
<u></u>		_	
5			
6			
/ •			
0.			l ———
~ •			
••			
~ .			
I •			
··			
7.			
8			
9			
0.			
l.			
2.			
3			
	l ———— I		
5			
7.	l <u> </u>		
7. 3.			
3.			
)			
			-
	I		

30 E050 STL Edison

0.0

Data File: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83245.d

Report Date: 24-Aug-2005 07:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83245.d Lab Smp Id: 661886 Client Smp ID: F08 Inj Date: 24-AUG-2005 01:30

Client Smp ID: F081605

Operator : CD Smp Info : 661886 Inst ID: VOAMS7.i

Misc Info : E050;9297;;CJM Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.c Cal File: v82916.d

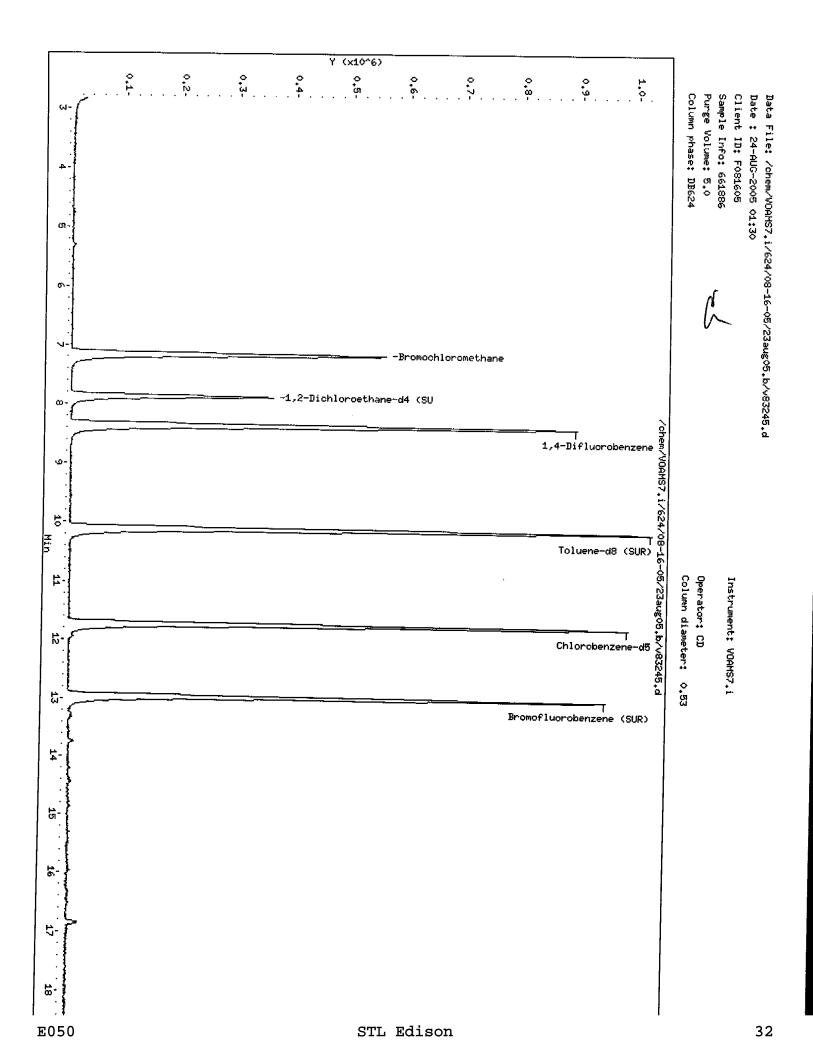
Dil Factor: 1.00000 Integrator: HP RTE Compound Sublist: PPVOAv.sub Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name Value Description DF 1.00000 Dilution Fact Vo 5.00000 Sample Volume Dilution Factor

Cpnd Variable Local Compound Variable

						CONCENTRA	ATIONS
	_	QUANT SIG				ON-COLUMN	FINAL
C	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/L)
-		====	==	=======================================		======	######################################
*	2 Bromochloromethane	128	7.149	7.139 (1.000)	389355	30.0000	
\$	16 1,2-Dichloroethane-d4 (SUR)	104	7.858	7.856 (0.940)	93169	29.5119	20
*	19 1,4-Difluorobenzene	114	8.356	8.346 (1.000)	1720850	30.0000	30
\$	37 Toluene-d8 (SUR)	98	10.095	10.085 (0.862)	1442181		
*	32 Chlorobenzene-d5	117	11.716	11.715 (1.000)		28.0092	28
\$	41 Bromofluorobenzene (SUR)	174		•	1263625	30.0000	
		1/4	12.948	12.947 (1.105)	587110	27.6672	29



Client ID: MW6A

Site: Phillipshurg

Lab Sample No: 661887

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83246.d

<u>Parameter</u>	Analytical Result <u>Units: uq/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethane 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene	Units: uq/l ND ND ND 1.5 ND 2.8 11 ND ND ND ND ND ND ND ND ND	
Ethylbenzene Xylene (Total)	ND ND ND	0.4 0.5 0.4

Client ID: MW6A Site: Phillipsburg

Lab Sample No: 661887

Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83246.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1NO VOLATILE ORGANIC COMPOUNDS FOUND	= ====== - ————		====
			<u> </u>
5.			
7.	_		
8. 9. 0.			
1.			
2. 3. 4	-		-
5.	-		
7.			
9.			
1.			
2			
5.			
6			
9			
·			

TOTAL ESTIMATED CONCENTRATION 0.0

Report Date: 24-Aug-2005 07:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83246.d Lab Smp Id: 661887 Inj Date : 24-AUG-2005 01:55 Client Smp ID: MW6A

Operator : CD Inst ID: VOAMS7.i

Smp Info : 661887

Misc Info : E050;9297;;CJM

Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.d Als bottle: 40 Cal File: v82916.d

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: PPVOAv.sub

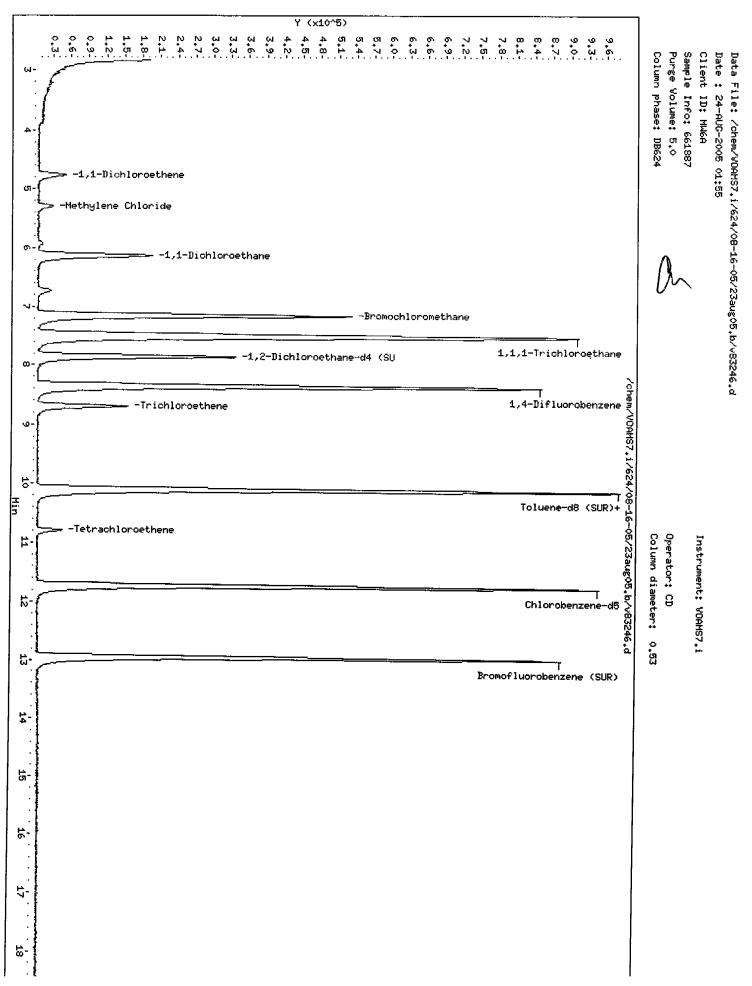
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000	Dilution Factor Sample Volume

Cpnd Variable Local Compound Variable

			QUANT SIG					CONCENTRA	TIONS
۵.	homes o		•					ON - COLUMN	FINAL
C	nipe	ounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
= 1	===		====	= =	=====	=====		======	TERRET
	10	1,1-Dichloroethene	96	4.750	4.758	(0.665)	50758	2.76316	2.8
	6	Methylene Chloride	84	5.290	5.298	(0.741)	31397	1.47021	-
	11	. 1,1-Dichloroethane	63	6.126		· ·			1.5
*	2	Bromochloromethane		=		(0.858)	455050	11.2521	11
			128	7.139	7.139	(1.000)	375622	30.0000	
	20	1,1,1-Trichloroethane	97	7.494	7.502	(1.050)	1521882	38.9038	39
\$	16	1,2-Dichloroethane-d4 (SUR)	104	7.857		(0.941)	91852	30.6669	31
*	19	1,4-Difluorobenzene	114	8.347		(1.000)	1632629		31
	25	Trichloroethene	95					30.0000	
s	3 7	Toluene-d8 (SUR)		8.693		(1.041)	112720	4.37803	4.4
~		· · ·	98	10.086	10.085	(0.862)	1379527	28.5820	28
	38	Toluene	91	10.153	10.170	(0.867)	39314	0.58451	0.58
	35	Tetrachloroethene	166	10.786	10.794	-	30001		
*	32	Chlorobenzene-d5	117			•		0.99508	1.00
Ś	41			11.707	11.715	(1.000)	1184506	30.0000	
٧	-4.T	Bromofluorobenzene (SUR)	174	12.939	12.947	(1.105)	562569	28.2815	28



Date : 24-AUG-2005 01:55

Client ID: MW6A

Instrument: VOAMS7.i

Sample Info: 661887 Purge Volume: 5.0

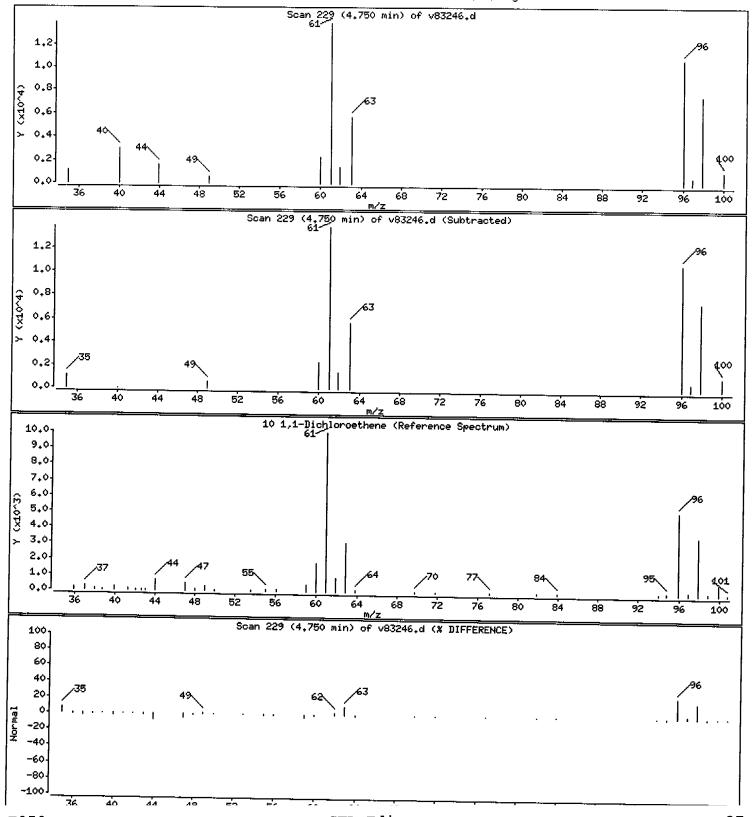
Operator: CD

Column phase: DB624

Column diameter: 0.53

10 1,1-Dichloroethene

Concentration: 2.8 ug/L



Date : 24-AUG-2005 01:55

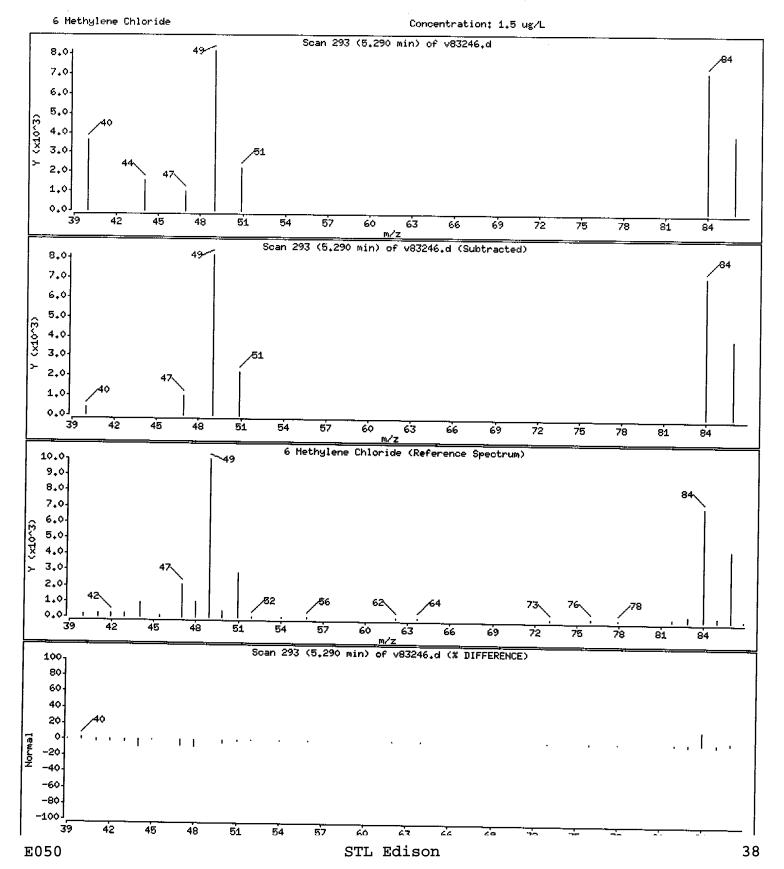
Client ID: MW6A

Instrument: VOAMS7.i

Sample Info: 661887 Purge Volume: 5.0

Operator: CD

Column phase: DB624



Date : 24-AUG-2005 01:55

Client ID: MW6A

Instrument: VOAMS7.i

Sample Info: 661887

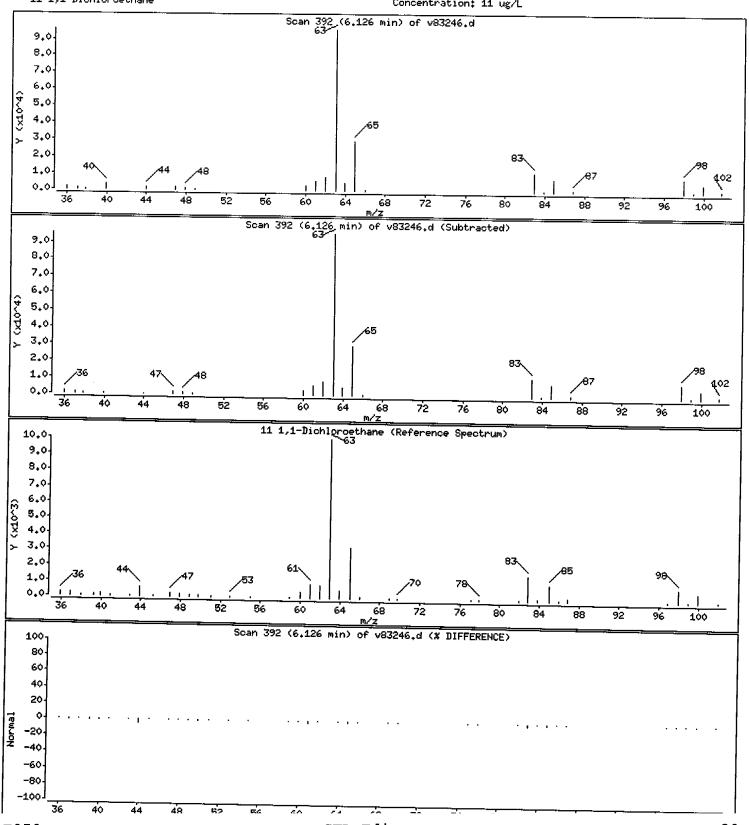
Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

11 1,1-Dichloroethane

Concentration: 11 ug/L



Date : 24-AUG-2005 01:55

Client ID: MW6A

Instrument: VOAMS7.i

Sample Info: 661887

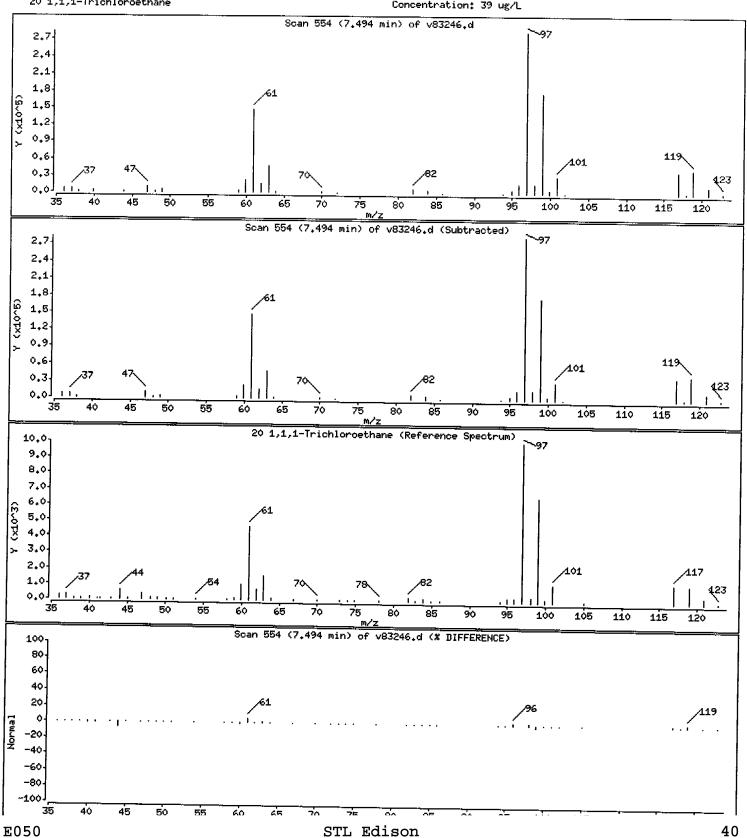
Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

20 1,1,1-Trichloroethane

Concentration: 39 ug/L



Date : 24-AUG-2005 01:55

Client ID: MW6A

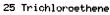
Instrument: VOAMS7.i

Sample Info: 661887 Purge Volume: 5.0

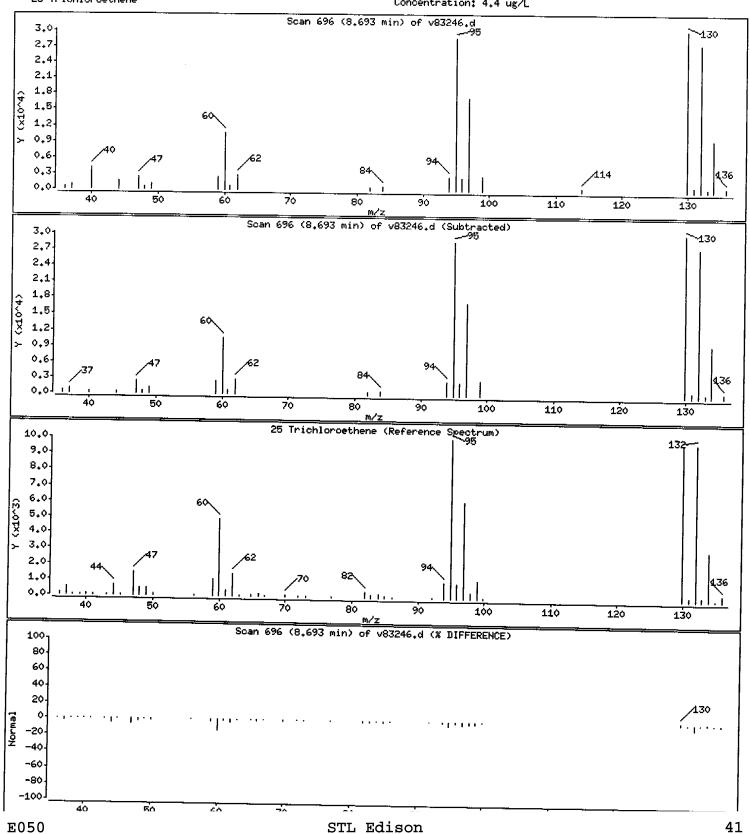
Operator: CD

Column phase: DB624

Column diameter: 0.53



Concentration: 4.4 ug/L



Date : 24-AUG-2005 01:55

Client ID: MW6A

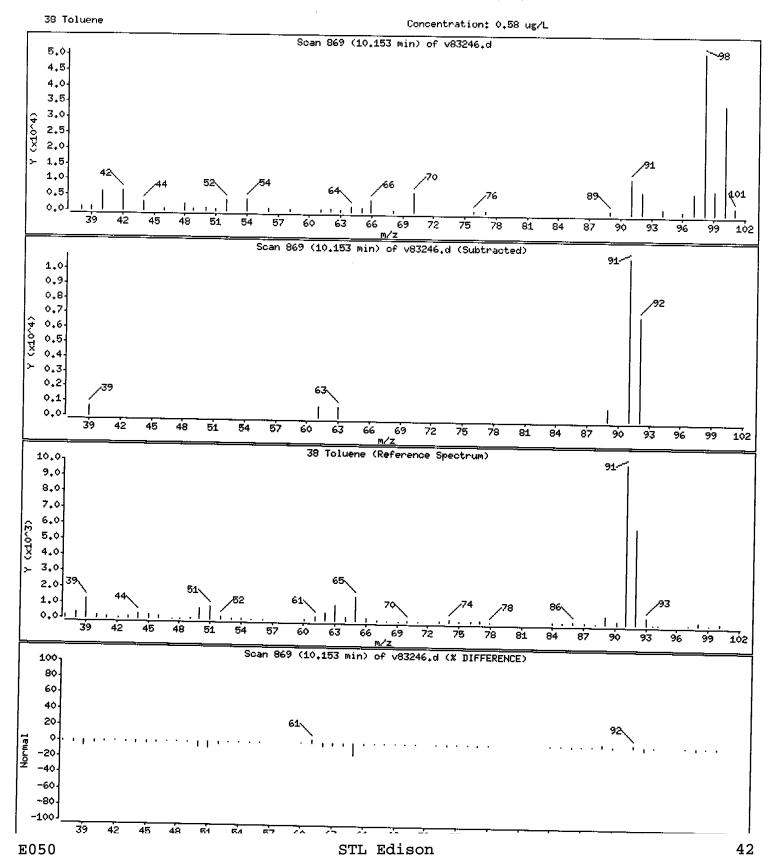
Instrument: VOAMS7.i

Sample Info: 661887

Purge Volume: 5.0

Operator: CD

Column phase: DB624



Date : 24-AUG-2005 01:55

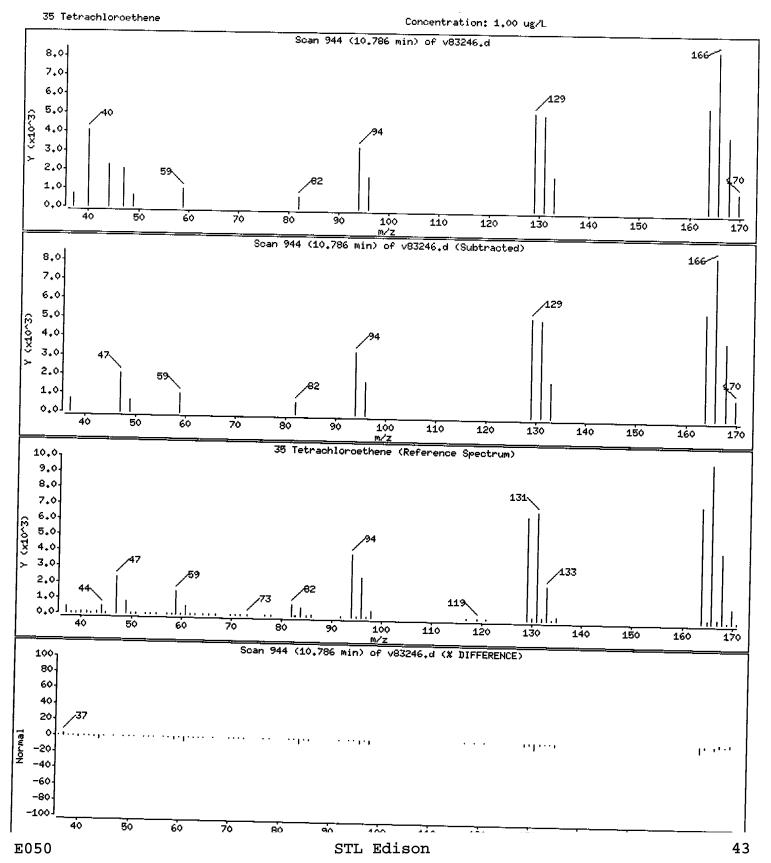
Client ID: MW6A

Instrument: VOAMS7.i

Sample Info: 661887

Purge Volume: 5.0 Column phase: DB624

Operator: CD



Client ID: MW6B Lab Sample No: 661888 Site: Phillipsburg

Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83247.d

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane	Units: uq/1 ND ND ND ND 0.6 1.3 1.6 ND	Units: ug/1 0.3 0.3 0.3 0.2 0.5 0.2 0.4 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.4 0.4 0.3 0.3 0.3 0.3 0.3
Toluene Chlorobenzene Ethylbenzene Xylene (Total)	ND ND ND ND	0.4 0.4 0.5 0.4

Client ID: MW6B Site: Phillipsburg

Lab Sample No: 661888 Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83247.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1. Fluorodichloromethane 2.	4.06	3.4	
4.			
6. 7.			
9.			
11. 12.			
14.			
16.			
18.			
21.			
23. 24.			
25			
27. 28. 29.			
30			

TOTAL ESTIMATED CONCENTRATION 3.4

45

Report Date: 24-Aug-2005 07:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83247.d Lab Smp Id: 661888 Client Smp ID: MW6B

Inj Date : 24-AUG-2005 02:21

Operator : CD Inst ID: VOAMS7.i

Smp Info : 661888

Misc Info : E050;9297;;CJM

Comment :

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.d

Als bottle: 41

Dil Factor: 1.00000
Integrator: HP RTE

Integrator: HP RTE Compound Sublist: PPVOAv.sub

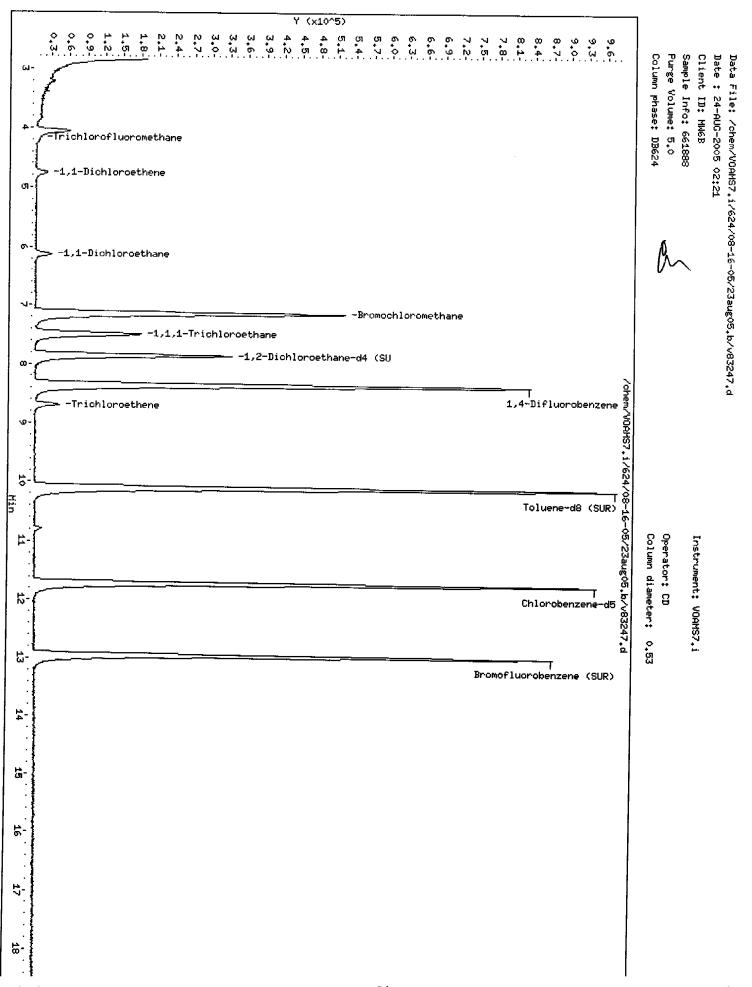
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000 5.00000	Dilution Factor Sample Volume

Cpnd Variable Local Compound Variable

					CONCENTRA	ATIONS
	QUANT SIG				ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/L)
		==	===== ======	======		======
9 Trichlorofluorometh	nane 101	4.203	4.209 (0.588) 19420	0.63768	0.64
10 1,1-Dichloroethene	96	4.760	4.758 (0.666) 22944	1.28711	1.3
11 l,1-Dichloroethane	63	6.128	6.109 (0.857) 63641	1.62165	1.6
* 2 Bromochloromethane	128	7.149	7.139 (1.000) 364506	30.0000	+.0
20 1,1,1-Trichloroetha	nne 97	7.487	7.502 (1.047) 289924	7.63734	7.6
\$ 16 1,2-Dichloroethane-	d4 (SUR) 104	7.850	7.856 (0.940	9582	29.9619	30
 19 1,4-Difluorobenzene 	114	8.348	8.346 (1.000) 1629747	30.0000	50
25 Trichloroethene	95	8.694	8.692 (1.041) 31445	1.22348	1.2
\$ 37 Toluene-d8 (SUR)	98	10.087	10.085 (0.862		28.7181	29
* 32 Chlorobenzene-d5	117	11.708	11.715 (1.000		30.0000	23
\$ 41 Bromofluorobenzene	(SUR) 174	12.940	12.947 (1.105		27.7577	28



Date : 24-AUG-2005 02:21

Client ID: MW6B

Instrument: VOAMS7.i

Sample Info: 661888

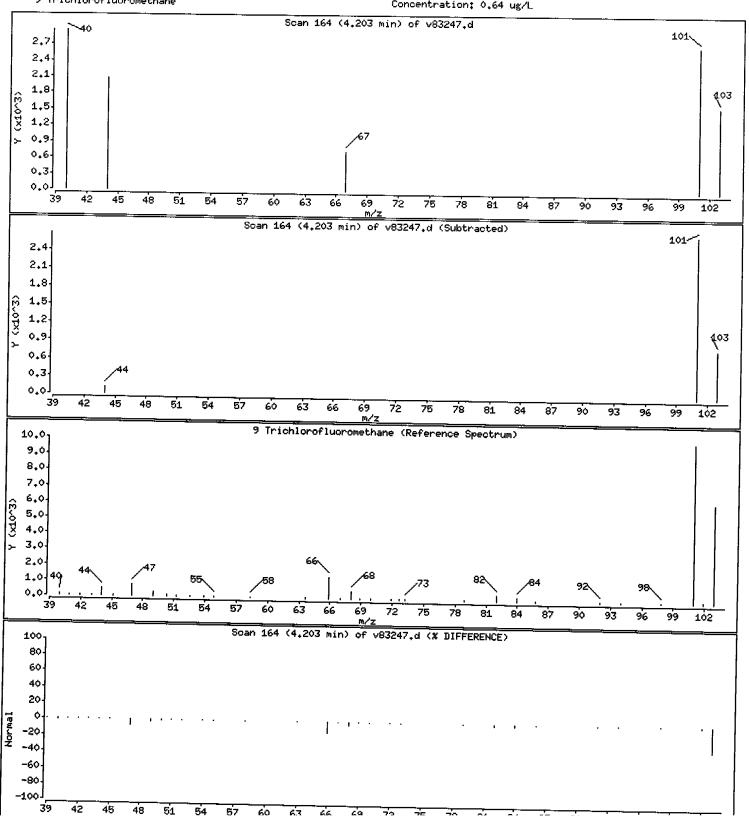
Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

9 Trichlorofluoromethane

Concentration: 0.64 ug/L



Data File: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83247.d

Date : 24-AUG-2005 02:21

Client ID: MW6B

Instrument: VOAMS7.i

Sample Info: 661888

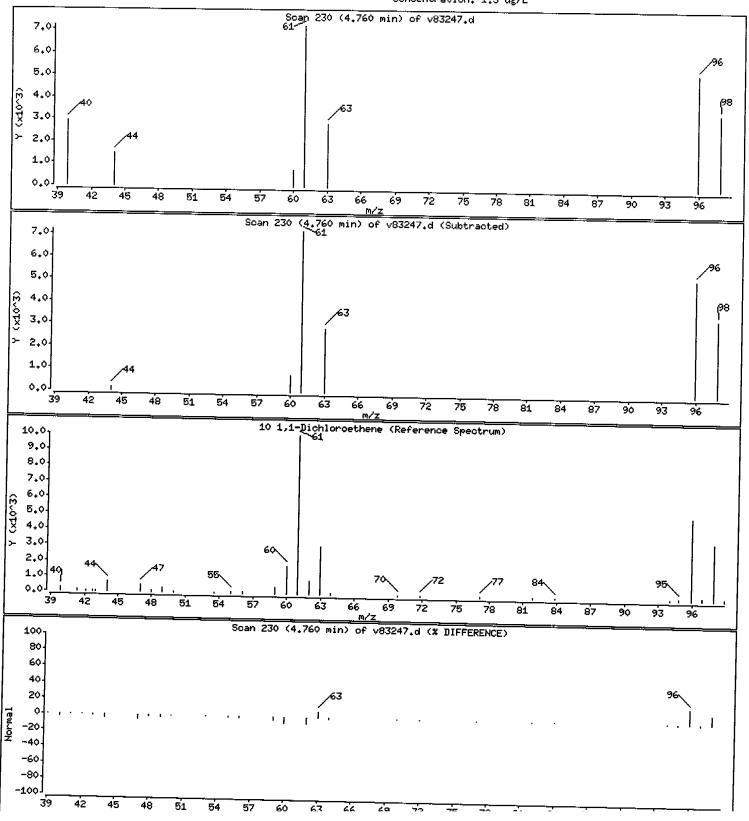
Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

10 1,1-Dichloroethene

Concentration: 1.3 ug/L



Date : 24-AUG-2005 02:21

Client ID: MW6B

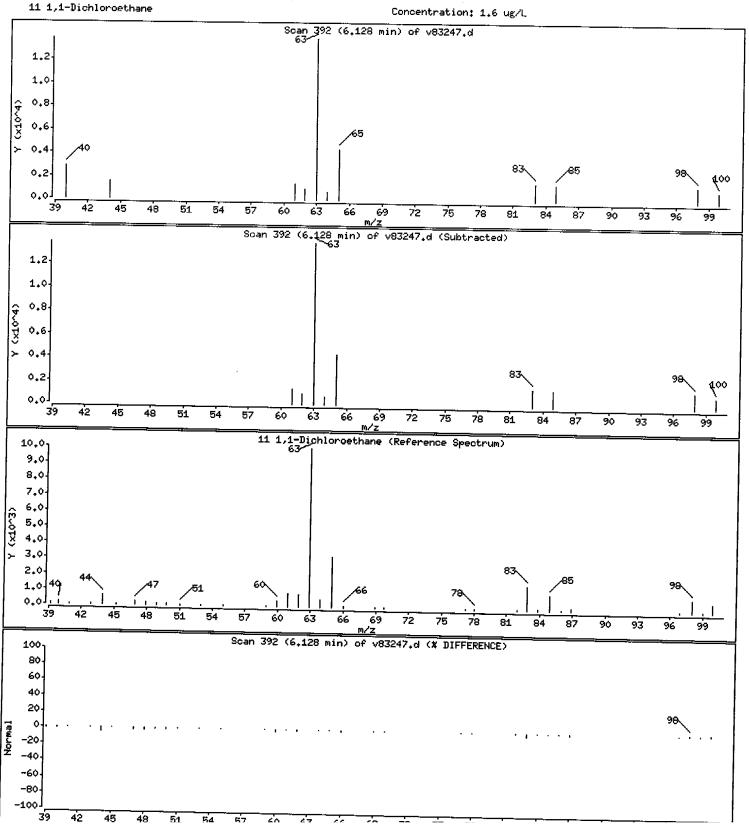
Instrument: VOAMS7.i

Sample Info: 661888

Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53



E050

STL Edison

50

Date : 24-AUG-2005 02:21

Client ID: MW6B

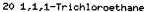
Instrument: VOAMS7.i

Sample Info: 661888

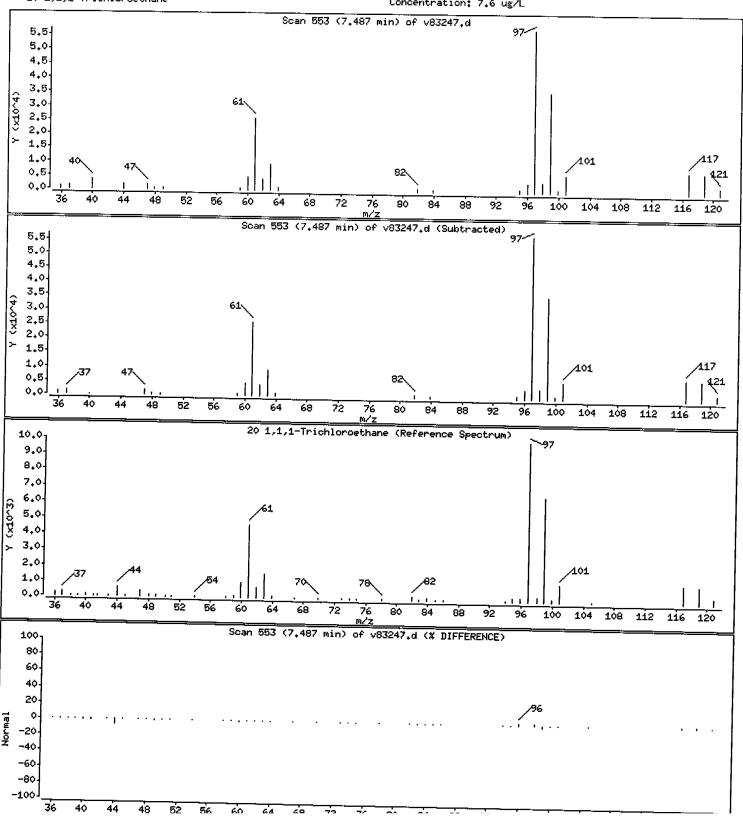
Purge Volume: 5.0

Operator: CD

Column phase: DB624 Column diameter: 0.53



Concentration: 7.6 ug/L



Date : 24-AUG-2005 02:21

Client ID: MW6B

Instrument: VOAMS7.i

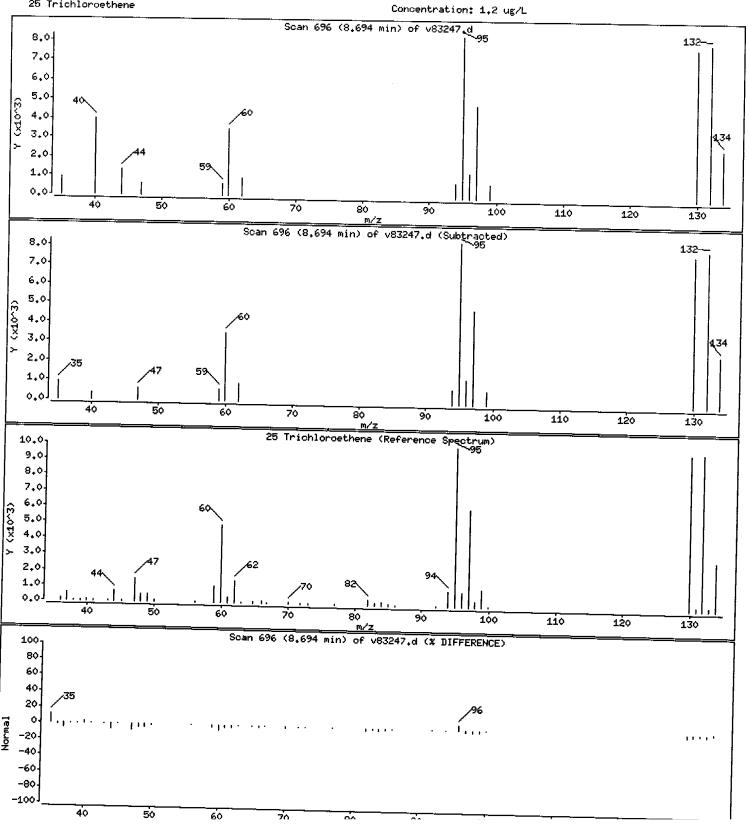
Sample Info: 661888

Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

25 Trichloroethene



Date : 24-AUG-2005 02:21

Client ID: MW6B

Instrument: VOAMS7.i

Sample Info: 661888
Purge Volume: 5.0

Operator: CD

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match

CAS Number Library

Fluorodichloromethane

75-43-4

NISTO2.1

4401

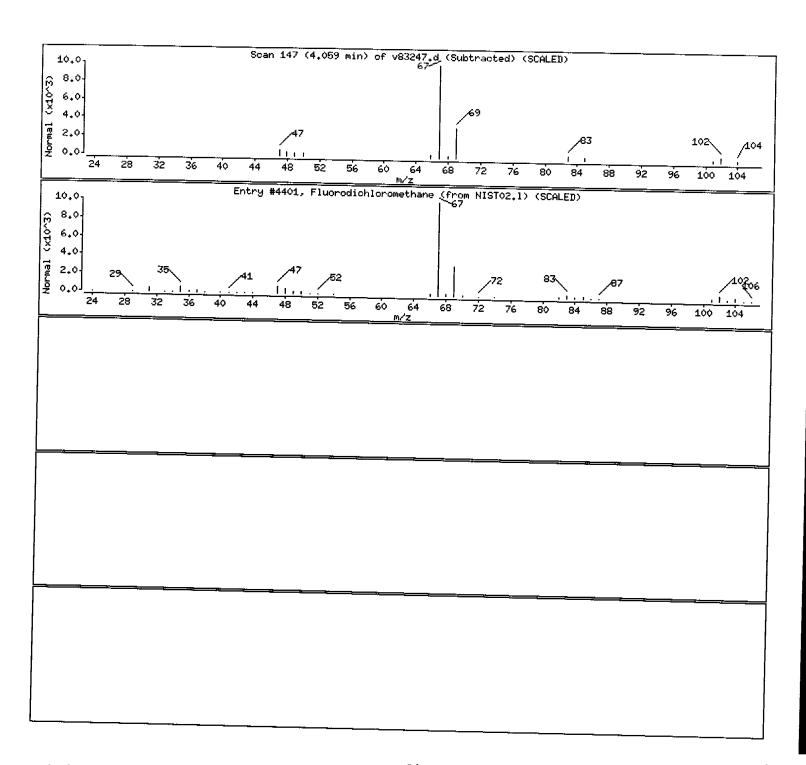
Entry

CHC12F

Quality Formula

91

Weight 102



Client ID: **T081605**Lab Sample No: **661889**

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/16/05 Matrix: WATER
Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83248.d

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene	Units: ug/l ND	
Chlorobenzene Ethylbenzene Xylene (Total)	ND ND ND	0.4 0.5 0.4

Client ID: T081605 Site: Phillipsburg

Lab Sample No: 661889 Lab Job No: E050

Date Sampled: 08/16/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83248.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l] ~
1NO VOLATILE ORGANIC COMPOUNDS FOUND 2.			===
4.	-		
5			
8.			
ő	-		
2.			
4.			
6.			
8 9			
) . L .			
3 .			
),			
7.			
) .			-
). <u> </u>			

TOTAL ESTIMATED CONCENTRATION 0.0

Report Date: 24-Aug-2005 07:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83248.d

Lab Smp Id: 661889 Client Smp ID: T081605

Inj Date : 24-AUG-2005 02:47 Operator : CD Smp Info : 661889 Inst ID: VOAMS7.i

Misc Info : E050;9297;;CJM

Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: TSTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.c Cal File: v82916.d

Als bottle: 42

Dil Factor: 1.00000 Integrator: HP RTE

Compound Sublist: PPVOAv.sub

Target Version: 3.50

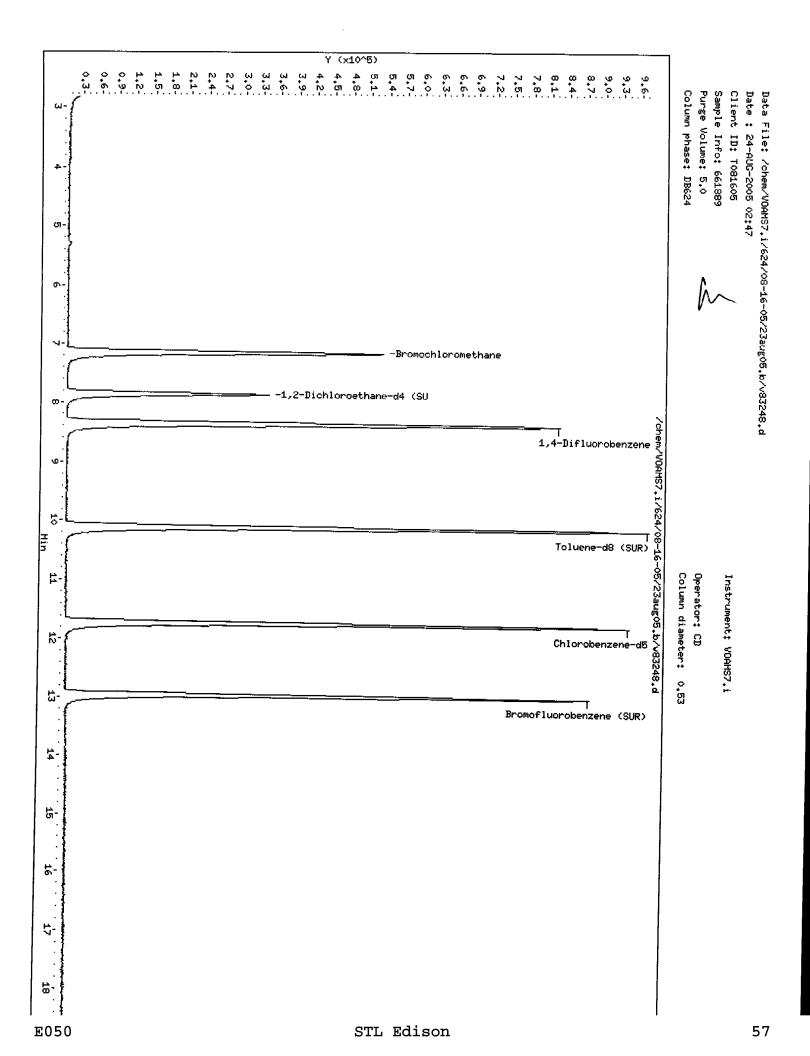
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000 5.00000	Dilution Factor Sample Volume

Cpnd Variable

Local Compound Variable

		Oliane are				CONCENTRA	ATIONS
c	ompounds	QUANT SIG				ON-COLUMN	FINAL
	-	MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/L)
=	### = = = = = = = = = = = = = = = = = =	===	==	======================================	E=======	======	======
*	2 Bromochloromethane	128	7.140	7.139 (1.000)	372204	30.0000	
\$	16 1,2-Dichloroethane-d4 (SUR)	104	7.857	7.856 (0.942)			
*	19 1,4-Difluorobenzene			· ·	85953	29.2883	29
		114	8.339	8.346 (1.000)	1599692	30.0000	
\$	37 Toluene-d8 (SUR)	98	10.086	10.085 (0.862)	1373564	28.7489	
*	32 Chlorobenzene-d5	117	11.707	11.715 (1.000)			29
Ś	41 Bromofluorobenzene (SUR)		•		1172540	30.0000	
*	STOMOTTHOLODENZENE (SUR)	174	12.948	12.947 (1.106)	552161	28.0415	28



Client ID: F081705 Lab Sample No: 661890 Site: Phillipsburg

Lab Job No: E050

Date Sampled: 08/17/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83249.d

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane Bromomethane	ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.3
Methylene Chloride	ND	0.2
Trichlorofluoromethane	ND	0.5
1,1-Dichloroethene	ND ND	0.2
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND ND	0.3
cis-1,2-Dichloroethene	ND ND	0.4
Chloroform	ND	0.4
1,2-Dichloroethane	ND	0.5 0.3
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3
cis-1,3-Dichloropropene	ND	0.2
Trichloroethene Dibromochloromethane	ND	0.4
1 1 2-Trichlomethane	ND	0.3
1,1,2-Trichloroethane Benzene	ND	0.3
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.2
Bromoform	ND	0.4
Tetrachloroethene	ND	0.2
1,1,2,2-Tetrachloroethane	ND	0.4
Toluene	ND ND	0.3
Chlorobenzene	ND ND	0.4
Ethylbenzene	ND ND	0.4
Xylene (Total)	ND	0.5
	1415	0.4

Client ID: **F081705** Site: Phillipsburg

Lab Sample No: 661890 Lab Job No: E050

Date Sampled: 08/17/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83249.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	_
1NO VOLATILE ORGANIC COMPOUNDS FOUND_			===:
J			
4. 5.	-		
6. 7.			
9.			-
1.			
3.			
5.			
7.	-		
9.			
1.			
3.			
4			
6			
8 9			
O			

TOTAL ESTIMATED CONCENTRATION 0.0

Report Date: 24-Aug-2005 07:36

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83249.d

Lab Smp Id: 661890 Client Smp ID: F081705

Inj Date : 24-AUG-2005 03:13

Operator : CD Inst ID: VOAMS7.i

Smp Info : 661890

Misc Info : E050;9297;;CJM \

Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.d

Als bottle: 43

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: PPVOAv.sub

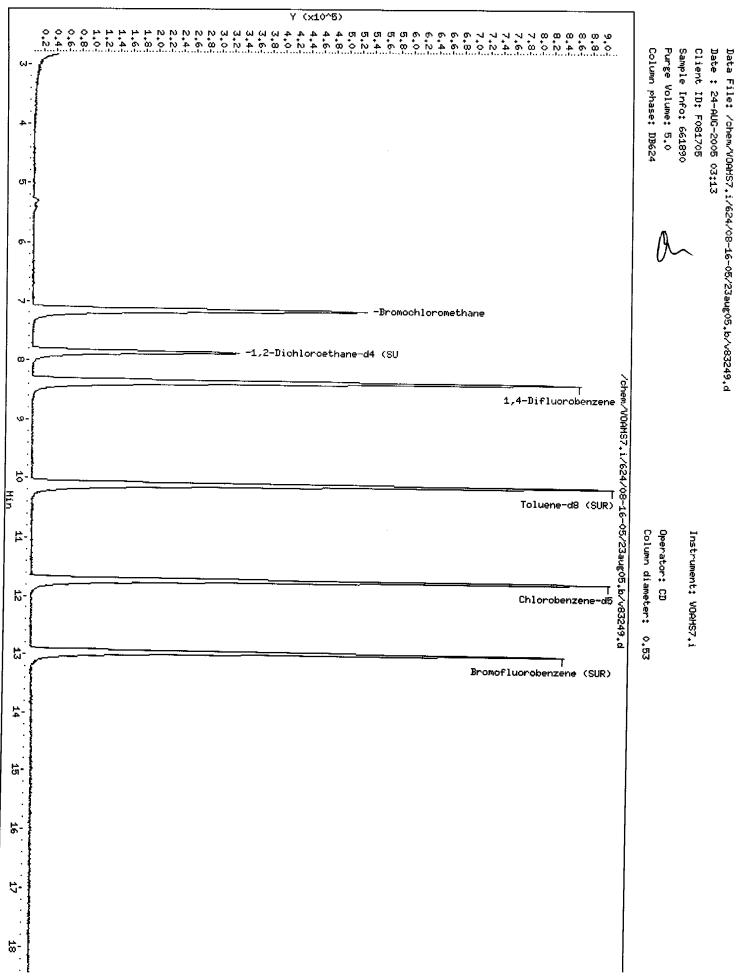
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000 5.00000	Dilution Factor Sample Volume

Cpnd Variable Local Compound Variable

						CONCENTRA	ATIONS
-		QUANT SIG				ON-COLUMN	FINAL
Ç¢	mpounds	MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/L)
=-	=======================================	====	==	===== ======		======	======
*	2 Bromochloromethane	128	7.144	7.139 (1.000)	369391	30.0000	
\$	16 1,2-Dichloroethane-d4 (SUR)	104	7.854	7.856 (0.941)	90678	31.0014	31
*	19 1,4-Difluorobenzene	114	8.343	8.346 (1.000)	1594389	30.0000	31
\$	37 Toluene-d8 (SUR)	98	10.091	10.085 (0.862)	1307013	27.2784	
*	32 Chlorobenzene-d5	117	11.712	11.715 (1.000)	1175872		27
\$	41 Bromofluorobenzene (SUR)	174	12.944	12.947 (1.105)	535841	30.0000 27.1356	27



Client ID: MW37A Lab Sample No: 661891 Lab Job No: E050

Site: Phillipsburg

Date Sampled: 08/17/05 Matrix: WATER Date Received: 08/17/05 Level: LOW

Date Analyzed: 08/24/05 Purge Volume: 5.0 ml GC Column: DB624 Dilution Factor: 1.0

Instrument ID: VOAMS7.i Lab File ID: v83250.d

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene	ND N	0.3 0.3 0.2 0.5 0.2 0.4 0.3 0.4 0.5 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.4 0.5
Chlorobenzene Ethylbenzene Xylene (Total)	1.0 ND ND ND	0.4 0.4 0.5 0.4

Client ID: MW37A Site: Phillipsburg

Lab Sample No: 661891

Lab Job No: E050

Date Sampled: 08/17/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83250.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
1. C6H12 Cycloalkane 2.	6.74		í
4			
7. 8.			
9. 10. 11.			
13.			
15. 16.			
18.			
20			
24.			
26. 27.			
28. 29. 30.			

TOTAL ESTIMATED CONCENTRATION 4.6

Report Date: 24-Aug-2005 07:36

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83250.d Lab Smp Id: 661891 Client Smp ID: MW37A

Inj Date : 24-AUG-2005 03:39

Operator : CD

Smp Info : 661891

Misc Info : E050;9297;;CJM

Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth_Date : 24-Aug-2005_06:49 moroneyc Quant_Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.d

Als bottle: 44

Dil Factor: 1.00000 Integrator: HP RTE Target Version: 3.50

Compound Sublist: PPVOAv.sub

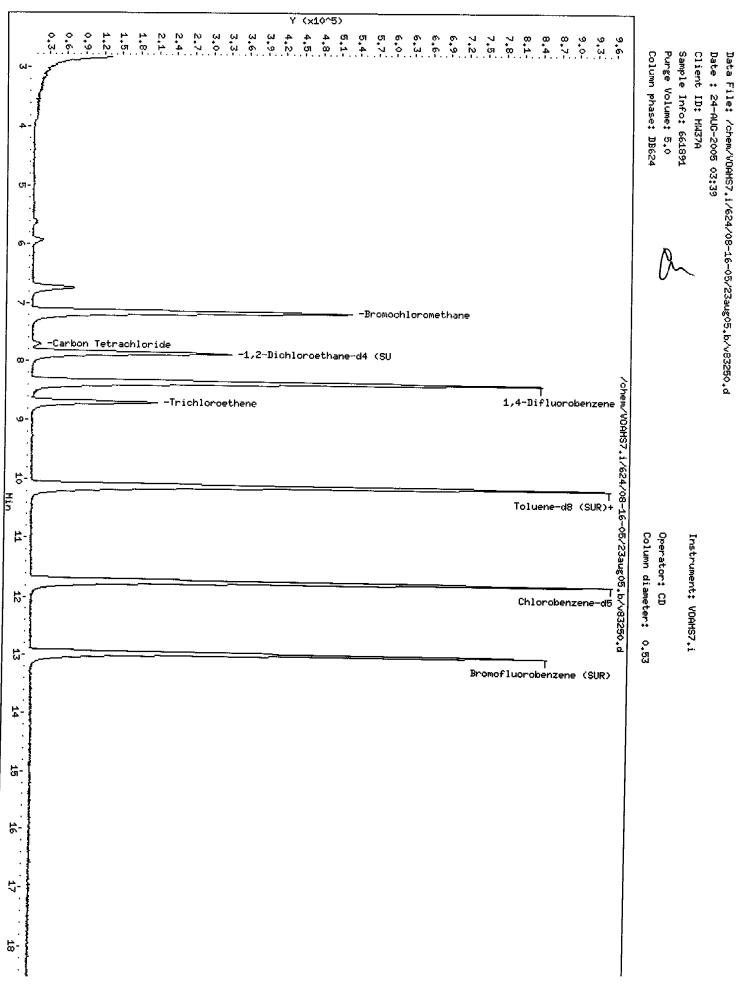
Inst ID: VOAMS7.i

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name Value Description ------1.00000 Dilution Factor 5.00000 Vo Sample Volume

Cpnd Variable Local Compound Variable

CONCENTRATIONS OUANT SIG ON-COLUMN FINAL Compounds RT EXP RT REL RT RESPONSE MASS (ug/L) (ug/L) EE EEE=== ===== -----====== ====== 2 Bromochloromethane 128 7.152 7.139 (1.000) 359438 30.0000 21 Carbon Tetrachloride 117 7.709 7.705 (1.078) 19878 0.56451 \$ 16 1,2-Dichloroethane-d4 (SUR) 104 7.853 7.856 (0.940) 87021 30.2153 30 19 1,4-Difluorobenzene 114 8.351 8.346 (1.000) 1569891 30.0000 25 Trichloroethene 95 8.697 8.692 (1.041) 158319 6.39485 6.4 \$ 37 Toluene-d8 (SUR) 98 10.099 10.085 (0.862) 1335649 27.7352 91 10.166 10.170 (0.868) 70050 117 11.711 11.715 (1.000) 1181847 174 12.944 12.947 (1.105) 532162 38 Toluene 70050 1.04383 1.0 32 Chlorobenzene-d5 30.0000 \$ 41 Bromofluorobenzene (SUR) 174 532162 26.8131 27



Data File: /ohem/VOAMS7,i/624/08-16-05/23aug05,b/v83250.d

Date : 24-AUG-2005 03:39

Client ID: MW37A

Instrument: VOAMS7.i

Sample Info: 661891 Purge Volume: 5.0

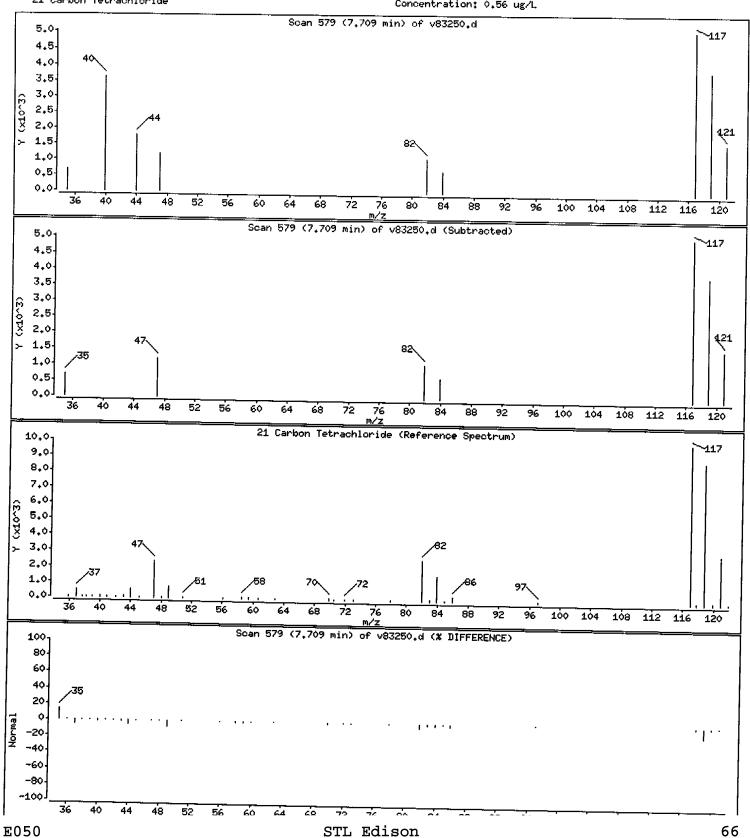
Operator: CD

Column phase: DB624

Column diameter: 0.53

21 Carbon Tetrachloride

Concentration: 0.56 ug/L



Date : 24-AUG-2005 03:39

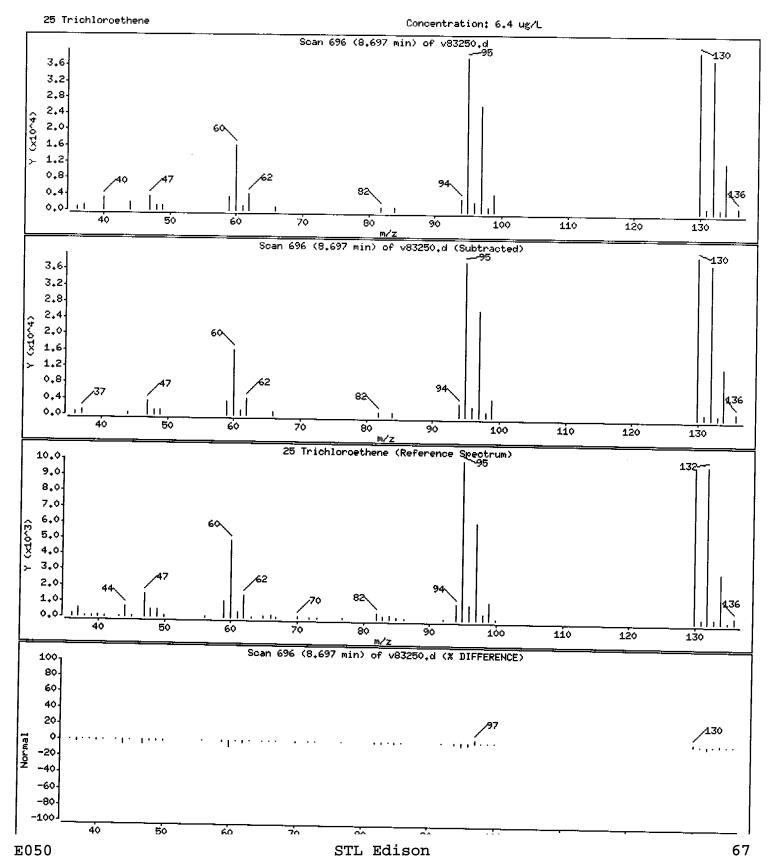
Client ID: MW37A

Instrument: VOAMS7.i

Sample Info: 661891

Purge Volume: 5.0 Column phase: DB624

Operator: CD



Date : 24-AUG-2005 03:39

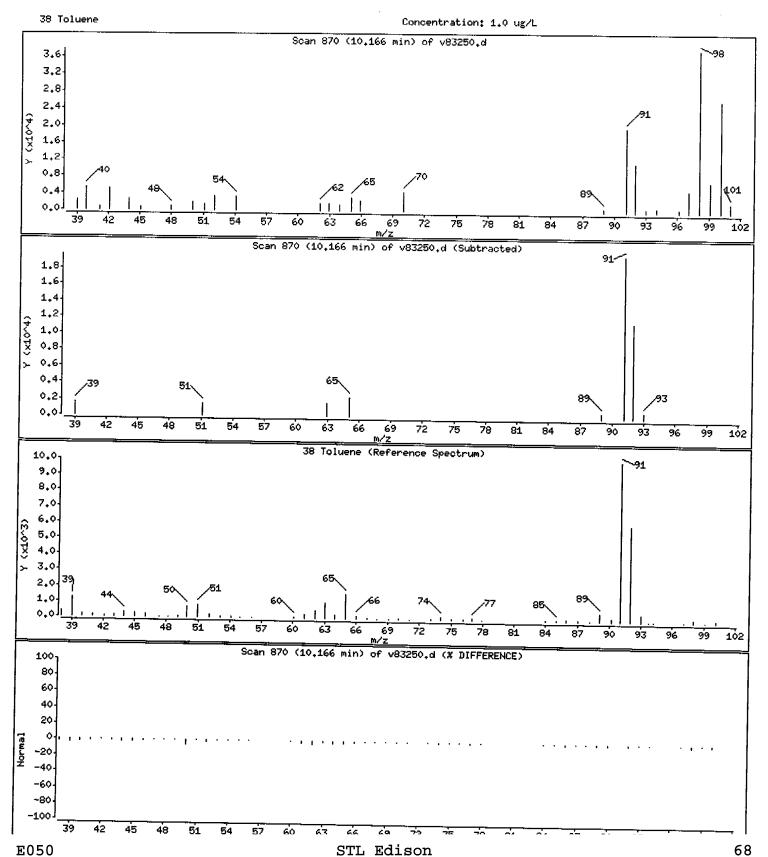
Client ID: MW37A

Instrument: VOAMS7.i

Sample Info: 661891 Purge Volume: 5.0

Operator: CD

Column phase: DB624



Date : 24-AUG-2005 03:39

Client ID: MW37A

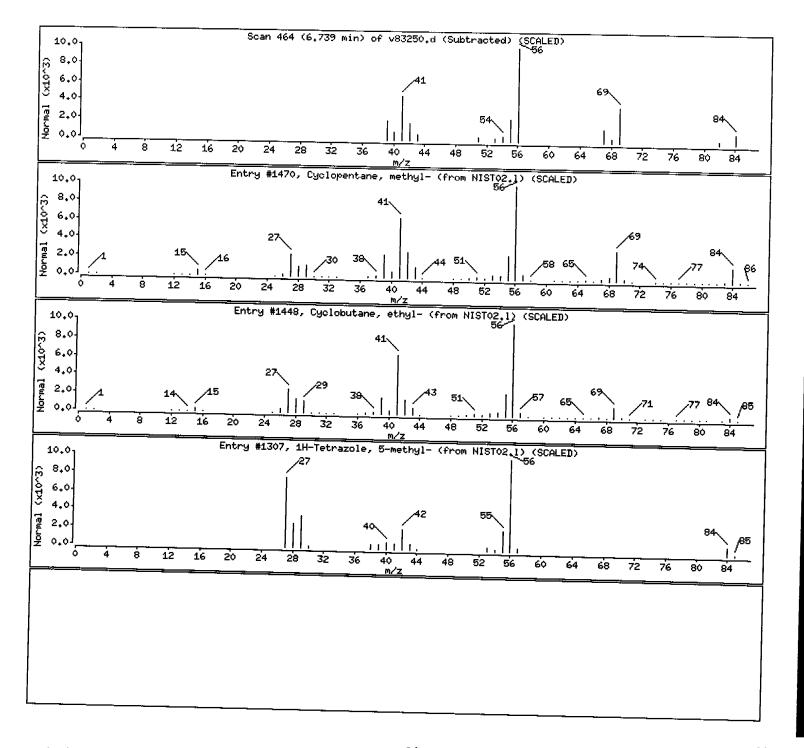
Instrument: VOAMS7.i

Sample Info: 661891 Purge Volume: 5.0

Operator: CD

Column phase: DB624

Library Search Compound Match C6H12 Cycloalkane	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentane, methyl-	96-37-7	NISTO2.1	1470	86	C6H12	84
Cyclobutane, ethyl-	4806-61-5	NISTO2.1	1448	78	C6H12	84
1H-Tetrazole, 5-methyl-	4076-36-2	NISTO2,1	1307	64	C2H4N4	84



Client ID: MW37C

Site: Phillipshum

Lab Sample No: 661892

Site: Phillipsburg Lab Job No: E050

Date Sampled: 08/17/05
Date Received: 08/17/05
Date Received: 08/17/05
Date Received: Low

Date Analyzed: 08/24/05
GC Column: DB624
Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83251.d

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	ND N	0.3 0.3 0.3 0.2 0.5 0.2 0.4 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
Xylene (Total)	ND	0.4

Client ID: MW37C Site: Phillipsburg

Lab Sample No: 661892 Lab Job No: E050

Date Sampled: 08/17/05 Date Received: 08/17/05 Date Analyzed: 08/24/05

Matrix: WATER Level: LOW

GC Column: DB624

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS7.i
Lab File ID: v83251.d

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Q
	= ======		====:
1NO VOLATILE ORGANIC COMPOUNDS FOUND		···	
2.			
		·	ļ
	-	·	
- -	-	-	l
	_	·	
7. 8.	_		
8.	_		
	_	.l <u>-</u>	
<i>r</i> ,	_		
- 0.			
<u></u>			
12.	-		
13.	-		
14	-		
15.	-		
16.	- <u>-</u>		
17.	-		
18.	-		
19	_		
20			
21			
21.			
22.	-		
23,	·		
24.	·		
25.	-		
<u></u>			
27			
28	.		
29.			
30.			
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		 -	
······································	' <u> </u>	i.	

TOTAL ESTIMATED CONCENTRATION 0.0

Report Date: 24-Aug-2005 07:36

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83251.d Lab Smp Id: 661892 Inj Date : 24-AUG-2005 04:05 Client Smp ID: MW37C

Operator : CD Inst ID: VOAMS7.i

Smp Info : 661892

Misc Info : E050;9297;;CJM

Comment

Method : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Meth Date : 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.c Als bottle: 45 Dil Factor: 1.00000 Cal File: v82916.d

Integrator: HP RTE

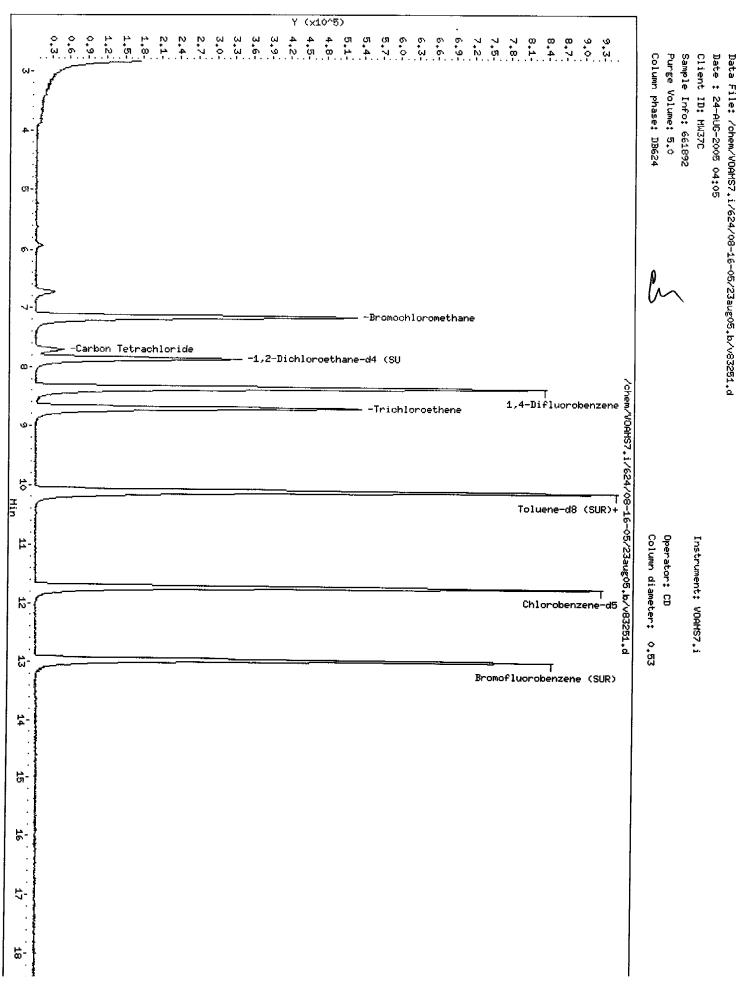
Compound Sublist: PPVOAv.sub Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000 5.00000	Dilution Factor Sample Volume

Cpnd Variable Local Compound Variable

		OVII) == 0.5.				CONCENTRA	ATIONS
C	pmpounds	QUANT SIG				ON - COLUMN	FINAL
	•	MASS	ŔT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/L)
	**************************************	====	==	==========		======	======
*	2 Bromochloromethane	128	7.150	7.139 (1.000)	356069	30.0000	
	21 Carbon Tetrachloride	117	7.707	7.705 (1.078)	66413	1.90391	
\$	16 1,2-Dichloroethane-d4 (SUR)	104	7.859	7.856 (0.941)	86478	29.8608	1.9
*	19 1,4-Difluorobenzene	114	8.349	8.346 (1.000)	1578618		30
	25 Trichloroethene	95	8.695	8.692 (1.041)		30.0000	
\$	37 Toluene-d8 (SUR)				392405	15.7624	16
	38 Toluene	98	10.096	10.085 (0.862)	1337817	28.1627	28
*		91	10.172	10.170 (0.869)	68209	1.03039	1.0
	32 Chlorobenzene-d5	117	11.709	11.715 (1.000)	1165797	30.0000	1.0
ş	41 Bromofluorobenzene (SUR)	174	12.942	12.947 (1.105)	527250	26.9313	27



Date : 24-AUG-2005 04:05

Client ID: MW37C

Instrument: VOAMS7.i

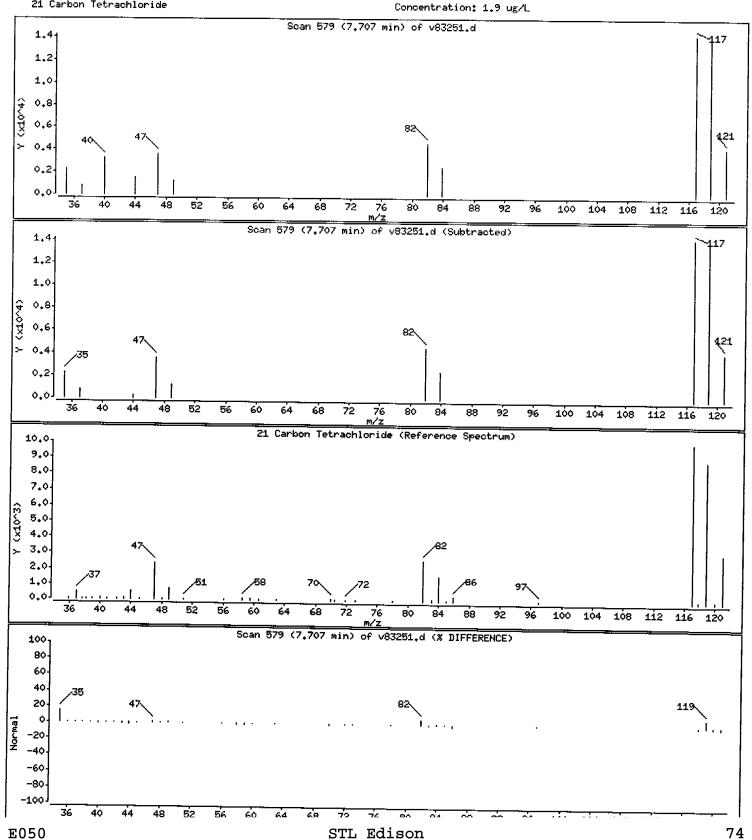
Sample Info: 661892 Purge Volume: 5.0

Operator: CD

Column diameter: 0.53

21 Carbon Tetrachloride

Column phase: DB624



Date : 24-AUG-2005 04:05

Client ID: MW37C

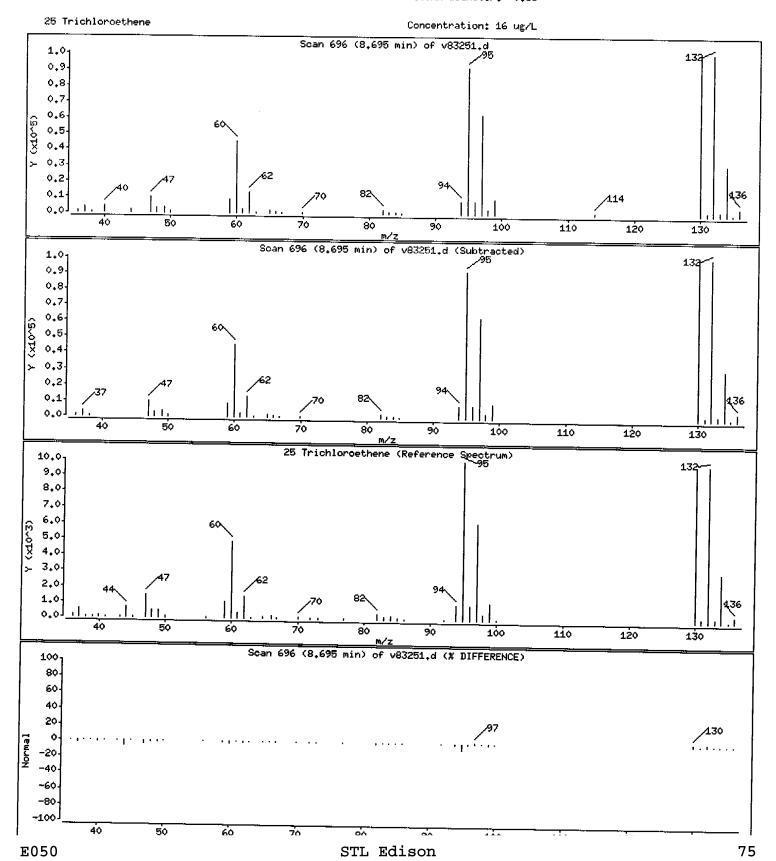
Instrument: VOAMS7.i

Sample Info: 661892 Purge Volume: 5.0

Operator: CD

Column phase: DB624

Column diameter: 0,53



Date : 24-AUG-2005 04:05

Client ID: MW37C

Instrument: VOAMS7.i

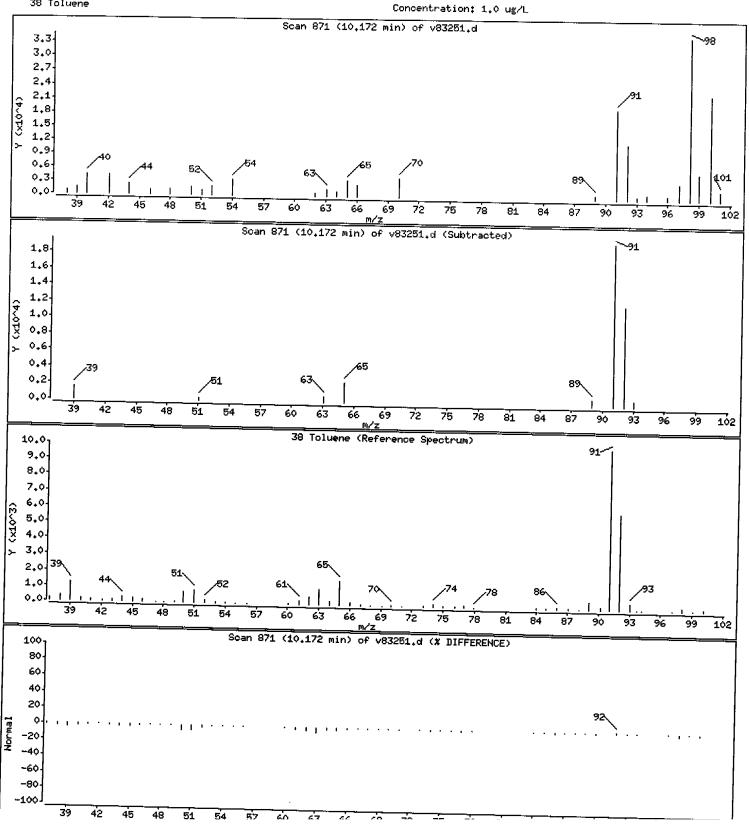
Sample Info: 661892

Purge Volume: 5.0 Column phase: DB624

Operator: CD

Column diameter: 0.53

38 Toluene



Tuning Results Summary

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: V82911 BFB Injection Date: 08/16/05

Instrument ID: VOAMS7 BFB Injection Time: 1137

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50 75 95 96 173 174 175 176	15.0 - 40.0% of mass 95 30.0 - 60.0% of mass 95 Base Peak, 100% relative abundance 5.0 - 9.0% of mass 95 Less than 2.0% of mass 174 50.0 - 100.0% of mass 95 5.0 - 9.0% of mass 174 95.0 - 101.0% of mass 174 5.0 - 9.0% of mass 176	19.9 47.8 100.0 6.7 0.0 (0.0)1 76.0 5.4 (7.1)1 74.8 (98.4)1 4.6 (6.1)2
	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 02 03 04 05 06 07 08 09 10 12 13 14 15 16 17	CLIENT ID ====================================	SAMPLE No. ====================================	FILE ID ====================================		
20 21 22					

page 1 of 1

Bate : 16-AUG-2005 11:37

Client ID: VBFB228

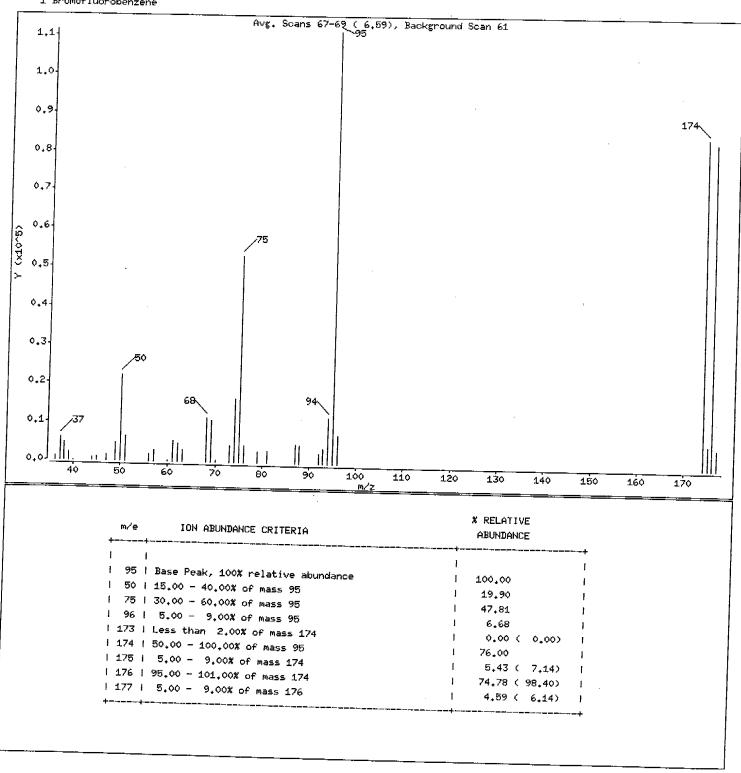
Instrument: VOAMS7.i

Sample Info: VBFB228

50NG

Column phase: DB-624 1 Bromofluorobenzene Operator: VOAMS 1

Column diameter: 0.53



50NG

Date : 16-AUG-2005 11:37

Client ID: VBFB228

Instrument: VOAMS7.i

Sample Info: VBFB228

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: v82911.d

Spectrum: Avg. Scans 67-69 (6.59), Background Scan 61

Location of Maximum: 95.00 Number of points: 37

_	m/z	ΥΥ	m/z	Y	m/z	Y	m/z	Y
 	36,00 37,00 38,00	1153 5851 4728	51,00 56,00 57,00	6317 1798 2928	73.00 74.00	4470 16271	94.00 95.00	11888 111384
1	39,00 40.00	2173 66	60.00 61.00	360 I 5495 I	75,00 76,00 79,00	4390 1	96.00 .74.00 .75.00	7445 84648 6043
1 1 1 +-	44.00 45.00 47.00 49.00 50.00	810 1053 1598 4705 22160	62.00 63.00 68.00 69.00 70.00	4710 3021 11338 10806 413	81.00 87.00 88.00 92.00 93.00		76.00 77.00	83296 5111

Date : 16-AUG-2005 11:37

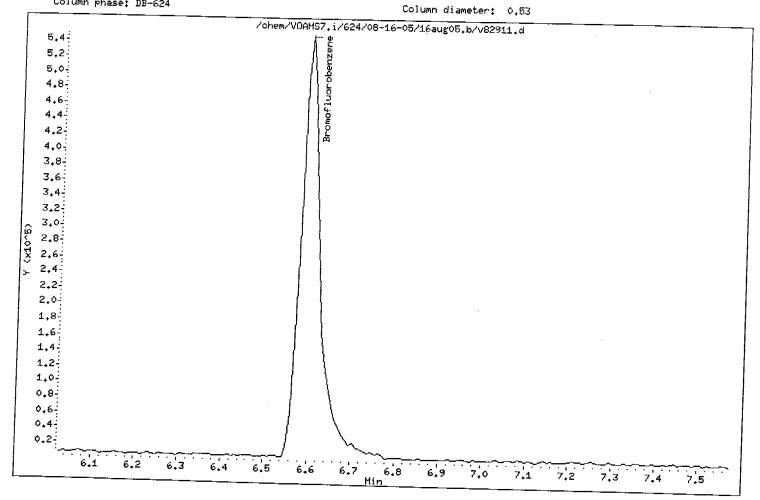
Client ID: VBFB228 Sample Info: VBFB228

50NG

Instrument: VOAMS7.i

Operator: VOAMS 1

Column phase: DB-624



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: V83202 BFB Injection Date: 08/23/05

Instrument ID: VOAMS7 BFB Injection Time: 0632

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50 75 95 96 173 174 175 176	15.0 - 40.0% of mass 95 30.0 - 60.0% of mass 95 Base Peak, 100% relative abundance 5.0 - 9.0% of mass 95 Less than 2.0% of mass 174 50.0 - 100.0% of mass 95 5.0 - 9.0% of mass 174 95.0 - 101.0% of mass 174 5.0 - 9.0% of mass 176	17.9 46.1 100.0 6.2 0.0 (0.0)1 79.3 4.8 (6.1)1 77.4 (97.6)1 5.1 (6.6)2
	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB	DATE	TIME
	=======================================	=======================================		ANALYZED	ANALYZED
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17	VSTD235 VV235B F081605 MW6A MW6B T081605 F081705 MW37A MW37C	VSTD235 VV235B 661886 661887 661888 661889 661891 661892	FILE ID ====================================	ANALYZED ====================================	ANALYZED ====================================
21					
22					
•		 /.			

page 1 of 1

Date : 23-AUG-2005 06:32

Client ID: VBFB235

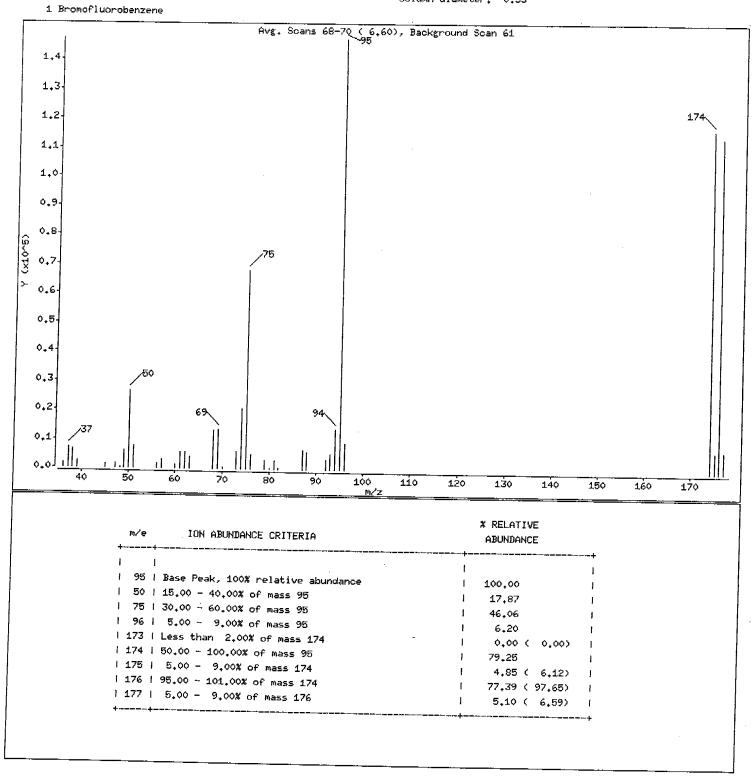
Instrument: VOAMS7.i

Sample Info: VBFB235

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



Date : 23-AUG-2005 06:32

Client ID: VBFB235

Instrument: VOAMS7.i

Sample Info: VBFB235

DONG

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: v83202.d

Spectrum: Avg. Scans 68-70 (6.60), Background Scan 61

Location of Maximum: 95.00 Number of points: 38

4	m/z	ΥΥ	m/z	Y	m/z	Y	MZ	Y
1 1 1	36.00 37.00 38.00 39.00 45.00	1746 7242 6313 2444 1508	56,00 57,00 60,00 61,00 62,00	1787 3070 1201 5733 5869	74.00 .75.00 .76.00 .79.00 .80.00	20744 67800 5150 2979	94.00 95.00	5267 14016 147200 9131 116672
+- 	47.00 48.00 49.00	1606 377 6261	63,00 68.00 69.00	4086 ! 13338 ! 13524	81,00 82,00 87,00	3123 414 6950	175.00 176.00	7135 113928 7610
1	50,00 51,00	26304 7929	70,00 73,00	830 5976	88.00 92.00	5945 3276		1

50NG

Date : 23-AUG-2005 06:32

Client ID: VBFB235

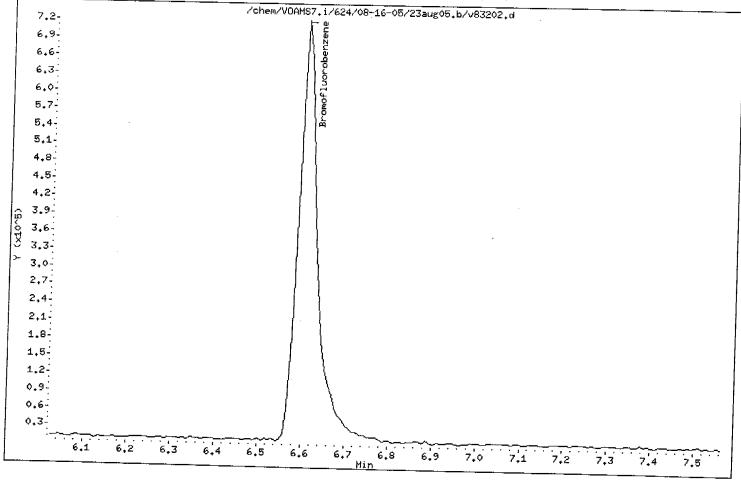
Instrument: VOAMS7.i

Sample Info: VBFB235

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



Method Blank Results Summary

VOLATILE METHOD BLANK SUMMARY

Matrix: WATER

Date Analyzed: 08/23/05

Level: LOW

Time Analyzed: 1926

Lab File ID: V83231

Heated Purge (Y/N) N

Instrument ID: VOAMS7

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	1			
		LAB	LAB	TIME
	CLIENT ID.	SAMPLE NO	FILE ID	ANALYZED
		1,0	LIBE ID	AMALIZED
Λ1	·			======
01	F081605	661886	V83245	0130
02	MW6A	661887	V83246	0155
03	MW6B	661888	V83247	0221
04	T081605	661889		l í
05			V83248	0247
1	F081705	661890	V83249	0313
	MW37A	661891	V83250	0339
07	MW37C	661892	V83251	
08	· · · -	001032	V03231	0405
09				
10				
11				
12				
13				
14	<u> </u>			
15				
16				
17				
18				
19				
20				
21		•		
22			· · · · · · · · · · · · · · · · · · ·	
23				
24				
25				
26			"	
27				
28				
29				
30				
3 V].				

COMMENTS:	

page 1 of 1

Client ID: VV235B

Site:

Lab Sample No: VV235B

Lab Job No: E050

Date Sampled: Matrix: WATER Date Received: Level: LOW

Date Analyzed: 08/23/05 GC Column: DB624

Instrument ID: VOAMS7.i

Lab File ID: v83231.d

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Chloromethane	ND	0. 2
Bromomethane	ND ND	0.3
Vinyl Chloride	ND	0.3
Chloroethane	ND	0.3
Methylene Chloride	ND ND	0.2
Acetone	ND ND	0.5
Carbon Disulfide	ND ND	1.3
Trichlorofluoromethane	ND ND	0.3
1,1-Dichloroethene	ND	0.2
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND ND	0.3
cis-1,2-Dichloroethene	ND	0.4
Chloroform	ND	0.4
1,2-Dichloroethane	ND	0.5
2-Butanone	ND	0.3
1,1,1-Trichloroethane	ND	0.9
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,2-Dichloropropane	ND	0.3
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.2 0.4
Dibromochloromethane	ND	0.4
1,1,2-Trichloroethane	ND	0.3
Benzene	ND	0.3
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.4
Bromoform	ND	0.2
4-Methyl-2-Pentanone	ND	0.5
2-Hexanone	ND	0.5
Tetrachloroethene	ND	0.4
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.4
Chlorobenzene	ND	0.4
Ethylbenzene	ND	0.5

Client ID: VV235B Lab Sample No: VV235B Site: Lab Job No: E050

Date Sampled: Date Sampled:
Date Received:
Date Analyzed: 08/23/05 Matrix: WATER Level: LOW

Purge Volume: 5.0 ml

GC Column: DB624

Instrument ID: VOAMS7.i Lab File ID: v83231.d

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 624

Dilution Factor: 1.0

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
Styrene Xylene (Total) Ethyl Ether Acrolein Freon TF Isopropanol Acetonitrile TBA Acrylonitrile MTBE Hexane DIPE Ethyl Acetate Vinyl Acetate Vinyl Acetate Tetrahydrofuran Cyclohexane Isobutanol Isopropyl Acetate n-Heptane n-Butanol Propyl Acetate Butyl Acetate 1,2-Dibromoethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Naphthalene Methylnaphthalene (total) Dimethylnaphthalene (total) Dichlorodifluoromethane		Limit
1,4-Dioxane n-Pentane 5-Methyl-2-Hexanone Isopropylbenzene	ND ND ND ND	56 0.4 5.0 0.5

Client ID: VV235B

Site:

Lab Sample No: VV235B

Lab Job No: E050

Date Sampled: Date Received:
Date Analyzed: 08/23/05
GC Column: DB624

Instrument ID: VOAMS7.i Lab File ID: v83231.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: uq/l</u>
1,2,4-Trimethylbenzene	ND	
Cyclohexanone	——————————————————————————————————————	0.4
1,2,4-Trichlorobenzene	ND ND	100
Methyl Methacrylate	ND	0.4
Allyl Alcohol	ND ND	0.7
Epichlorohydrin	ND ND	1000
Allyl Chloride	ND	4.8
Benzyl Chloride		5.0
Isoprene	ND	0.4
1,1,1,2-Tetrachloroethane	ND	0.4
Camphene (total)	ND	0.4
Camphor	ND	20
1,3,5-Trimethylbenzene	ND	20
1,2,3-Trichlorobenzene	ND	0.4
n-Butylbenzene	ND	0.3
sec-Butylbenzene	ND	0.3
tert-Butylbenzene	ND	0.4
p-Isopropyltoluene	ND	0.4
n-Propylbenzene	ND	0.4
m+p-Ethyltoluene	ND	0.4
o-Ethyltoluene	ND	1.0
Methyl Acetate	ND	1.0
Methyl cyclohexane	ND	0.3
1,2-Dibromo-3-chloropropage	ND	0.3
Cyclonexene	ND	0.3
1,2-Dichlorotrifluoroethane	ND	1.0
n-Propanol	ND	1.0
3-Methyl-1-Pentyn-3-ol	ND	500
Propylene Oxide	ND	250
Ethanol	ND	50
Chlorotrifluoroethane	ND	500
Dichlorofluoromethane	ND	1.0
Ethylene Oxide	ND	1.0
Methyl Formate	ND	500
	ND	500

Client ID: VV235B

Site:

Lab Sample No: VV235B

Lab Job No: E050

Date Sampled: Date Sampled:
Date Received:
Date Analyzed: 08/23/05

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

GC Column: DB624

Instrument ID: VOAMS7.i Lab File ID: v83231.d

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 624

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Method Detection Limit <u>Units: ug/l</u>
Isobutyraldehyde Amyl Acetate 1,2,3-Trichloropropane Chlorodifluoromethane 1,3-Dichloropropane Dibromomethane 1-Propene 2-Chloropropane 1-Chloropropane	ND ND ND ND ND ND ND ND	5.0 0.3 0.5 1.0 0.4 0.3 0.4 0.3

Client ID: VV235B	Lab Sample No: VV235B
Site:	Lab Job No: E050
Date Sampled: Date Received: Date Analyzed: 08/23/05 GC Column: DB624 Instrument ID: VOAMS7.i Lab File ID: v83231.d	Matrix: WATER Level: LOW Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 624

COMPOUND NAME	RT	EST. CONC.	Ç
1NO VOLATILE ORGANIC COMPOUNDS FOUND	_ =======		===
3			
7.			
·			
TOTAL ESTIMATED CONCE	NTRATION	0.0	

E050 STL Edison 92 Data File: /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83231.d Report Date: 24-Aug-2005 07:03

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS Data file : /chem/VOAMS7.i/624/08-16-05/23aug05.b/v83231.d Lab Smp Id: VV235B Client Smp ID: VV235B Inj Date : 23-AUG-2005 19:26 Operator : CD Inst ID: VOAMS7.i Smp Info : VV235B Misc Info : Comment : /chem/VOAMS7.i/624/08-16-05/23aug05.b/624_05.m Method Meth Date: 24-Aug-2005 06:49 moroneyc Quant Type: ISTD Cal Date : 16-AUG-2005 13:43 Cal File: v82916.d Als bottle: 25 Dil Factor: 1.00000 Integrator: HP RTE QC Sample: BLANK Compound Sublist: all.sub Target Version: 3.50 Processing Host: hpd2

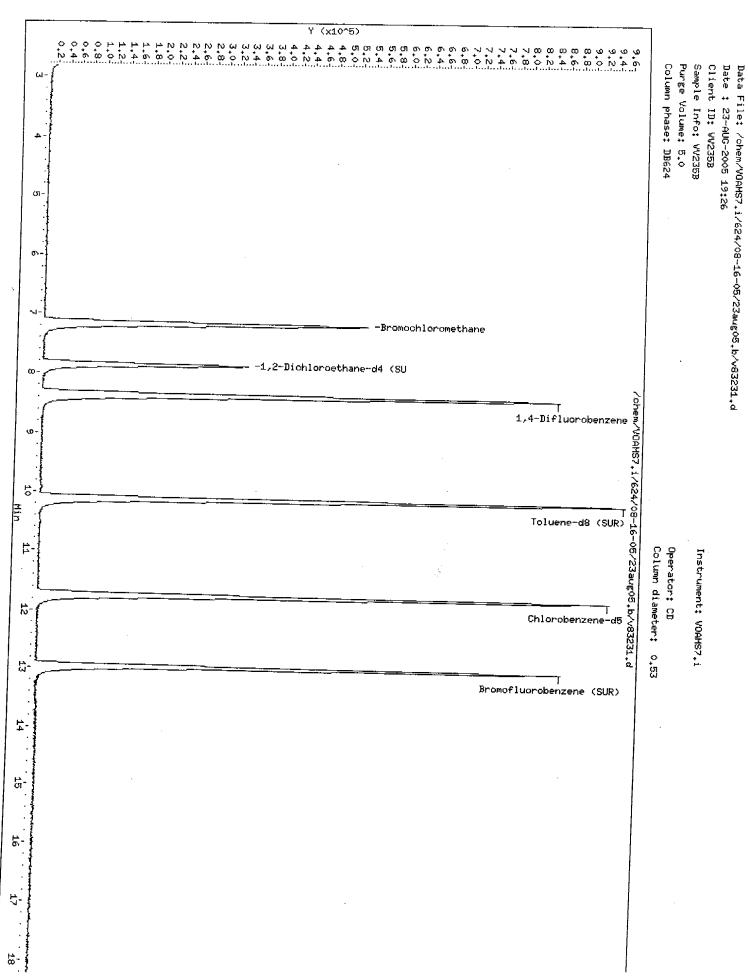
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF Vo	1.00000	Dilution Factor Sample Volume

Cpnd Variable

Local Compound Variable

a-			QUANT SIG				CONCENTRA ON-COLUMN	
Co	mpounds		MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	FINAL
==	###==== <u>#</u>		====	= =				(ug/L)
*	2 Bromochloromethane		128	7.149		======	======	=====
\$	16 1,2-Dichloroethane	-d4 (SUR)		=	(1.000)	364406	30.0000	
k	19 1,4-Difluorobenzen		104	7.867	7.856 (0.942)	90442	30.7667	31
ŝ		8	114	8.348	8.346 (1.000)	1602362	30.0000	
•	37 Toluene-d8 (SUR)		98	10.096	10.085 (0.862)	1362272		
*	32 Chlorobenzene-d5		117	11.717			28.1522	28
\$	41 Bromofluorobenzene	(SUR)			11.715 (1.000)	1187549	30.0000	
		(3011)	174	12.949	12.947 (1.105)	533435	26.7482	27



E050

Calibration Summary

VOLATILE ORGANICS INITIAL CALIBRATION DATA METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

LAB FILE ID: RRF5: V82914 RRF10: V82913 RRF20: V82912 RRF50: V82915 RRF200: V82916					
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Chloromethane	0.954	0.607		0.802	
Bromomethane	1.204				0.720
Vinyl Chloride	1.005			1.137	
Chloroethane	0.782			. –	
Methylene Chloride	1.758	1.878		0.724	
Acetone	0.394	0.356		1.604	
Carbon Disulfide	3.204	4.115	1		
Trichlorofluoromethane	2.734			3.579	
1,1-Dichloroethene	1.449	1.989	1	2.600	
1,1-Dichloroethane	3.281	1.665			
trans-1,2-Dichloroethene	1.854	3.587	1	3.071	
cis-1,2-Dichloroethene	1.865	2.020			
Chloroform	3.942	2.167	1	1.840	E .
1,2-Dichloroethane		4.360		3.757	
2-Butanone	0.522	0.559		0.464	
1,1,1-Trichloroethane	3.098	0.121		0.103	
Carbon Tetrachloride		3.425		2.972	j .
Bromodichloromethane	2.823 0.736	3.228	2.928	2.799	1
1,2-Dichloropropane		0.801	0.787	0.723	0.780
cis-1,3-Dichloropropene	0.418	0.448	0.412	0.391	0.380
Trichloroethene	0.550	0.640	0.619	0.566	0.620
Dibromochloromethane	0.474	0.502		0.452	0.472
1,1,2-Trichloroethane	0.700	0.892		0.770	0.883
Benzene	0.412	0.478	0.419	0.387	0.412
trans-1,3-Dichloropropene	1.084	1.168	1.062	0.993	1.028
2-Chloroethyl Vinyl Ether	0.592	0.740	0.683	0.637	0.729
Bromoform VIIIyI Echel	0.166	0.186	0.202	0.185	0.195
4-Methyl-2-Pentanone	0.353	0.439	0.418	0.412	0.475
2-Hexanone	0.305	0.300	0.266	0.236	0.236
Tetrachloroethene	0.173	0.210	0.167	0.169	0.170
1,1,2,2-Tetrachloroethane	0.757	0.854	0.737	0.702	0.769
Toluene	0.561	0.621	0.584	0.523	0.554
Chlorobenzene	1.668	1.896	1.665	1.581	1.708
Ethylbenzene	1.215	1.428	1.255	1.171	1.267
Styrene	0.519	0.605	0.549	0.506	0.509
Xylene (Total)	0.981	1.194	1.121	1.092	1.129
Ethyl Ether	0.705	0.812	0.735	0.689	0.715
Acrolein	0.977	1.248	1.114	1.007	0.960
Freon TF	0.113	0.113	0.110	0.117	0.106
10011 11	2.922	3.709	3.415	3.046	2.834
				1	

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

LAB FILE ID: RRF5: V82914 RRF10: V82913 RRF20: V82912 RRF50: V82915 RRF200: V82916					12
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
	=======	=======	=======	=======	=======
Isopropanol					
Acetonitrile	0.012	0.014	0.012	0.011	0.010
TBA	0.103	0.079			
Acrylonitrile	0.228	0.221	0.226		
MTBE	3.414	4.180	3.709		
Hexane					3.310
DIPE	6.108	7.592	6.662	6.434	5.804
Ethyl Acetate	0.136	0.174	0.154		
Vinyl Acetate	4.485	5.652	5.047	4.421	4.108
Tetrahydrofuran					1.100
Cyclohexane	2.269	2.976	2.603	2.424	2.275
Isobutanol		-		2.121	2.2/3
Isopropyl Acetate	0.534	0.656	0.610	0.556	0.555
n-Heptane			0.010	0.550	0.555
n-Butanol	0.015	0.015	0.016	0.016	0.016
Propyl Acetate	0.450	0.536	0.464	0.400	
Butyl Acetate	0.716	0.808	0.718	0.660	0.394
1,2-Dibromoethane	0.656	0.708	0.660	0.629	0.682
1,3-Dichlorobenzene	0.780	0.910	0.892	0.761	0.679
1,4-Dichlorobenzene	1.124	1.315	1.121		0.843
1,2-Dichlorobenzene	0.791	0.951	0.843	1.128	1.064
Naphthalene	0.278	0.348	0.287	0.798	0.835
Methylnaphthalene (total)	0.270	0.540	0.267	0.277	0.329
Dimethylnaphthalene (total)					
Dichlorodifluoromethane -	1.309	0.897	1.313		
1,4-Dioxane	0.002	0.002		1.229	1.183
n-Pentane	0.246	0.304	0.002	0.002	0.002
5-Methyl-2-Hexanone	0.240	0.304	0.305	0.257	0.242
Isopropylbenzene	1.910	2.289	2 073		
1,2,4-Trimethylbenzene	1.384	1.606	2.073	1.972	2.045
Cyclohexanone	1.504	1.000	1.467	1.369	1.393
1,2,4-Trichlorobenzene	0.284	0.374	 -		
Methyl Methacrylate	0.072		0.326	0.320	0.366
Allyl Alcohol	0.072	0.087	0.088	0.079	0.080
Epichlorohydrin	0.022		 .		
Allyl Chloride	0.022	0.024	0.023	0.021	0.022
Benzyl Chloride	0 400		.		
Isoprene	0.402	0.527	0.518	0.443	0.520
1,1,1,2-Tetrachloroethane	1.255	1.737	1.484	1.436	1.424
	0.594	0.701	0.633	0.581	0.630
~	l_				

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

LAB FILE ID: RRF5: V82914 RRF10: V82913 RRF20: V82912 RRF50: V82915 RRF200: V82916					
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Camphene (total)	=======	=======	=======	=======	
Camphor					
1,3,5-Trimethylbenzene	1.450	1.734	1.536	1.450	1.432
1,2,3-Trichlorobenzene	0.192	0.215			0.180
n-Butylbenzene	1.225	1.621	1.537		1.523
sec-Butylbenzene	1.384	1.606			1.323
tert-Butylbenzene	1.509	1.852		1.541	1.567
p-Isopropyltoluene	1.509	1.852		1.541	1.567
n-Propylbenzene	2.056	2.428	2.279		2.098
m+p-Ethyltoluene	_,,,,	2.120	2.275	2.0/3	2.098
o-Ethyltoluene			 	<u> </u>	
Methyl Acetate	0.964	1.120	1.045	0.946	
Methyl cyclohexane	0.508	0.681			
1,2-Dibromo-3-chloropropane	0.049	0.060	0.057	0.546	0.539
Cyclohexene -	0.045	0.000	0.05/	0.053	0.066
1,2-Dichlorotrifluoroethane					
n-Propanol – i					
3-Methyl-1-Pentyn-3-ol					
Propylene Oxide					
Ethanol					
Chlorotrifluoroethane					
Dichlorofluoromethane			ļ 		
Ethylene Oxide					
Methyl Formate					
Isobutyraldehyde	 .	····			
Amyl Acetate					
1,2,3-Trichloropropane	0.148	0.164	0.158		
Chlorodifluoromethane	0.110	0.104	0.128	0.144	0.147
1,3-Dichloropropage	0.770	0.878	0.780		
Dibromomethane	0.370	0.400	0.355	0.724	0.732
1-Propene	0.370	0.400	0.355	0.332	0.340
2-Chloropropane					
1-Chloropropane					
=======================================		=======	=======		
1,2-Dichloroethane-d4 (SUR)	0.056	0.056	0.056	=======	========
roluene-as (SUR)	1.188	1.236	1.229	0.054	0.052
Bromofluorobenzene (SUR)	0.490	0.512	0.514	1.205	1.254
		0.512	0.514	0.492	0.511

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd) METHOD 624

Calibration Date(s): 08/16/05 Instrument ID: VOAMS7 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

	1	CORDETCHIS	0.000
COMPOUND	CURVE	COEFFICENT	
			OR R^2
Chloromethane	AVRG	0.78900438	16.04
Bromomethane	AVRG	1.09080783	
Vinyl Chloride	AVRG	0.87027669	13.6* 15.1*
Chloroethane	AVRG	0.70604474	
Methylene Chloride	AVRG	1.70560647	13.3*
Acetone	AVRG	0.30647161	6.9* 24.0*
Carbon Disulfide	AVRG	3.67892114	9.6*
Trichlorofluoromethane	AVRG	2.50645502	12.2*
1,1-Dichloroethene	AVRG	1.46712961	8.1*
1,1-Dichloroethane	AVRG	3.22995360	6.9*
trans-1,2-Dichloroethene	AVRG	1.83504697	1
cis-1,2-Dichloroethene	AVRG	1.92079597	6.1* 7.5*
Chloroform	AVRG	3.96719137	7.5° 5.8*
1,2-Dichloroethane	AVRG	0.50778611	7.6*
2-Butanone	AVRG	0.10569851	11.4*
1,1,1-Trichloroethane	AVRG	3.12434288	5.6*
Carbon Tetrachloride	AVRG	2.93897238	5.8*
Bromodichloromethane	AVRG	0.76556352	4.4*
1,2-Dichloropropane	AVRG	0.40988172	6.4*
cis-1,3-Dichloropropene	AVRG	0.59891468	6.5*
Trichloroethene	AVRG	0.47310366	3.9*
Dibromochloromethane	AVRG	0.81287931	3.9^ 9.8*
1,1,2-Trichloroethane	AVRG	0.42151883	
Benzene	AVRG	1.06672062	8.0*
trans-1,3-Dichloropropene	AVRG	0.67602187	6.2* 9.2*
2-Chloroethyl Vinyl Ether	AVRG	0.18697089	9.2^ 7.3*
Bromoform	AVRG	0.41936398	/.3* 10.6*
4-Methyl-2-Pentanone	AVRG	0.26870858	12.4*
2-Hexanone	AVRG	0.17802236	10.0*
Tetrachloroethene	AVRG	0.76359083	7.4*
1,1,2,2-Tetrachloroethane	AVRG	0.56860522	
Toluene —	AVRG	1.70349055	6.4* 6.9*
Chlorobenzene	AVRG	1.26725235	
Ethylbenzene	AVRG	0.53771645	7.7*
Styrene	AVRG	1.10365516	7.7*
Xylene (Total)	AVRG	0.73117277	7.0*
Ethyl Ether	AVRG	1.06148585	6.6*
Acrolein	AVRG	0.11172937	11.3*
Freon TF	AVRG	3.18535465	3.7* 11.5*
		3.10333403	11.5*
	!	l	

^{*} Compound with required maximum % RSD value.

^{**} Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

		COEFFICENT	%RSD
COMPOUND	CURVE	A1	OR R^2
Isopropanol	1	=======	=======
Acetonitrile	AVRG	0.01010105	
TBA	AVRG	0.01210126	13.4
Acrylonitrile	AVRG	0.07718063	20.0
MTBE	AVRG	0.22554409	1.4
Hexane	AVRG	3.63740468	9.2
DIPE	AVRG	<u> </u>	
Ethyl Acetate	AVRG	6.52016835	10.4
Vinyl Acetate	AVRG	0.15050441	10.1
Tetrahydrofuran	AVRG	4.74252082	12.9
Cyclohexane	AVRG		
Isobutanol	AVRG	2.50931173	11.7
Isopropyl Acetate	AVRG		
n-Heptane	AVRG	0.58224401	8.5
n-Butanol	AVRG		
Propyl Acetate	AVRG	0.01567593	4.8
Butyl Acetate	AVRG	0.44880264	12.8
1,2-Dibromoethane	AVRG	0.71690523	7.9
1,3-Dichlorobenzene	AVRG	0.66648466	4.4
1,4-Dichlorobenzene	AVRG	0.83742761	7.8
1,4-Dichloropenzene	AVRG	1.15040530	8.3
1,2-Dichlorobenzene	AVRG	0.84338211	7.6
Naphthalene	AVRG	0.30396374	10.7
Methylnaphthalene (total)	AVRG		_
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	1.18639986	14.4
n-Pentane	AVRG	0.00175598	2.0
	AVRG	0.27076986	11.6
5-Methyl-2-Hexanone	AVRG		
Isopropylbenzene	AVRG	2.05798982	7.0
1,2,4-Trimethylbenzene	AVRG	1.44415250	6.8
Cyclohexanone	AVRG		
1,2,4-Trichlorobenzene	AVRG	0.33402525	11.0
Methyl Methacrylate	AVRG	0.08155607	8.1
Allyl Alcohol	AVRG		
\		0.02262437	4.5
Allyl Chloride	AVRG		
Benzyl Chloride	AVRG	0.48208380	11.7
soprene		1.46750996	11.8*
.,1,1,2-Tetrachloroethane		0.62801740	7.4*

^{*} Compound with required maximum % RSD value. ** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Calibration Time(s): 1159 1343

		[44=======	
COMPOUND		COEFFICENT	%RSD
COMPOUND	CURVE	A1	OR R^2
Camphene (total)	AVRG	=======	=======
Camphor	AVRG		
1,3,5-Trimethylbenzene	AVRG	1 52057702	
1,2,3-Trichlorobenzene	AVRG	1.52057703	8.3*
n-Butylbenzene		0.18636515	10.1*
sec-Butylbenzene	AVRG	1.46128050	10.5*
tert-Butylbenzene	AVRG	1.44415250	6.8*
p-Isopropyltoluene	AVRG	1.62475944	8.5*
n-Propylbenzene	AVRG	1.62475944	8.5*
m-p-Gthyltolage	AVRG	2.18680520	7.4*
m+p-Ethyltoluene	AVRG		
o-Ethyltoluene	AVRG		
Methyl Acetate	AVRG	0.99277090	9.1*
Methyl cyclohexane	AVRG	0.57980269	12.3*
1,2-Dibromo-3-chloropropane	AVRG	0.05697790	11.2*
Cyclohexene	AVRG		
1,2-Dichlorotrifluoroethane	AVRG		
n-Propanol	AVRG		
3-Methyl-1-Pentyn-3-ol	AVRG		***************************************
Propylene Oxide	AVRG		
Ethanol	AVRG		
Chlorotrifluoroethane	AVRG		· · · · · · · · · · · · · · · · · · ·
Dichlorofluoromethane	AVRG		
Ethylene Oxide	AVRG		
Methyl Formate	AVRG		
Isobutyraldehyde	AVRG		
Amyl Acetate	AVRG		
1,2,3-Trichloropropane	AVRG	0.15245408	5.6*
Chlorodifluoromethane	AVRG	0.20215400	5.67
1,3-Dichloropropane	AVRG	0.77671265	7.9*
Dibromomethane	AVRG	0.35940263	7.5* 7.5*
1-Propene	AVRG	0.55540205	7.5^
2-Chloropropane	AVRG		
1-Chloropropane	AVRG		
	=====	=======	=======
1,2-Dichloroethane-d4 (SUR)	AVRG	0.05503675	-
Toluene-d8 (SUR)	AVRG	1.22242247	3.1*
Bromofluorobenzene (SUR)	AVRG	0.50379922	2.1*
	DAVA	0.503/9922	2.3*

^{*} Compound with required maximum % RSD value. ** Compound with required minimum RRF value.

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK METHOD 624

Instrument ID: VOAMS7 Calibration Date: 08/23/05 Time: 0653

Heated Purge: (Y/N) N Init. Calib. Times: 1159 1343

	<u> </u>		MIN		MAX
COMPOUND	RRF	RRF20	RRF	∦D	%D
		=======	=======	=====	1
Chloromethane	0.789	0.898		-13.8	104
Bromomethane	1.091	1.245		-14.1	86.0
Vinyl Chloride	0.870	0.948		-9.0	96.0
Chloroethane	0.706	0.810		-14.7	
Methylene Chloride	1.706	1.516		11.1	
Acetone	0.306	0.264		13.7	
Carbon Disulfide	3.679	3.502		4.8	
Trichlorofluoromethane	2.507	2.558		-2.0	
1,1-Dichloroethene	1.467	1.317		10.2	
1,1-Dichloroethane	3.230	2.854		11.6	27.5
trans-1,2-Dichloroethene	1.835	1.720	i		30.5
cis-1,2-Dichloroethene	1.921	1.745		9.2	
Chloroform	3.967	3.485		12.2	
1,2-Dichloroethane	0.508	0.441		13.2	
2-Butanone	0.106	0.093		12.3	
1,1,1-Trichloroethane	3.124	2.641		15.5	
Carbon Tetrachloride	2.939	2.438		17.0	
Bromodichloromethane	0.765	0.671		12.3	
1,2-Dichloropropane	0.410	0.384		6.3	
cis-1,3-Dichloropropene_	0.599	0.528		11.8	
Trichloroethene	0.473	0.436			33.5
Dibromochloromethane	0.813	0.712		12.4	
1,1,2-Trichloroethane	0.422	0.387			29.0
Benzene	1.067	1.015	i		36.0
trans-1,3-Dichloropropene	0.676	0.580		14.2	
2-Chloroethyl Vinyl Ether	0.187	0.174	Ì	7.0	
Bromoform_	0.419	0.363		13.4	
4-Methyl-2-Pentanone	0.269	0.239		11.2	
2-Hexanone	0.178	0.153		14.0	
Tetrachloroethene	0.764	0.745			26.5
1,1,2,2-Tetrachloroethane	0.569	0.551			39.5
Toluene	1.704	1.552			25.5
Chlorobenzene	1.267	1.181	į		34.0
renarpensene i	0.538	0.504		6.0	41.0
Styrene	1.103	1.055			40.0
Xylene (Total)	0.731	0.701			40.0
Ethyl Ether	1.061	1.036			
		1.050		2.4	40.0

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VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date: 08/23/05 Time: 0653

Lab File ID: V83203 Init. Calib. Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Init. Calib. Times: 1159 1343

COMPOUND	RRF	RRF20	MIN	0.5	MAX
=======================================	6		RRF	%D =====	%D ====
Acrolein	0.112			-0.9	
Freon TF	3.185			-1.1	
Isopropanol					40.0
Acetonitrile	0.012	0.011		83	40.0
TBA	0.077			23.4	
Acrylonitrile	0.226		;	4.9	
MTBE	3.637			5.5	
Hexane		,		3.5	40.0
DIPE	6.520	6.251		4.1	
Ethyl Acetate	0.150			4.7	
Vinyl Acetate	4.743	4.500		5.1	
Tetrahydrofuran				3.1	40.0
Cyclohexane	2.509	2.405		4 1	40.0
Isobutanol				T	40.0
Isopropyl Acetate	0.582	0.543		6.7	
n-Heptane				0.7	40.0
n-Butanol	0.016	0.014		12.5	
Propyl Acetate	0.449				40.0
Butyl Acetate	0.717	0.618		13.8	
1,2-Dibromoethane	0.666	0.618			40.0
1,3-Dichlorobenzene	0.837	0.816			27.0
1,4-Dichlorobenzene	1.150	1.129	J	1 0	37.0
1,2-Dichlorobenzene	0.844	0.826			37.0
Naphthalene	0.304	0.258		15.1	
Methylnaphthalene (total)	l i	0.230	İ	73.7	
Dimethylnaphthalene (total)					40.0
Dichiorodifluoromethane	1.186	1.243	İ	-4.8	40.0
1,4-Dioxane	0.002	0.002	ļ	- 1	
n-Pentane	0.271	0.292			40.0
5-Methyl-2-Hexanone	0.2/1	0.232		-7.7	
lsopropylbenzene	2.058	1.877		ا م	40.0
1,2,4-Trimethylbenzene	1.444	1.328			40.0
Cvclohexanone		1.240		T I	40.0
1,2,4-Trichlorobenzene	0.334	0.329	İ		40.0
Mernyr Methacrytate	0.081	0.083			
Allyl Alcohol	3.001	0.003		-2.5	
Epichlorohydrin	0.022	0.023			40.0
	0.022	0.023		~4.5	40.0

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VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd) METHOD 624

Instrument ID: VOAMS7 Calibration Date: 08/23/05 Time: 0653

Lab File ID: V83203 Init. Calib. Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N Init. Calib. Times: 1159 1343

	1		MIN		MAX
COMPOUND	RRF	RRF20	RRF	%D	%D
7111 (%)	=======	========	=======	=====	====
Allyl Chloride			.	1	40.0
Benzyl Chloride	0.482			9.8	40.0
Isoprene	1.467			3.7	40.0
1,1,1,2-Tetrachloroethane	0.628	0.590		6.0	40.0
Camphene (total)					40.0
Camphor	<u> </u>		1		40.0
1,3,5-Trimethylbenzene	1.520			7.3	40.0
1,2,3-Trichlorobenzene	0.186			3.8	40.0
n-Butylbenzene	1.461			7.6	40.0
sec-Butylbenzene	1.444				40.0
tert-Butylbenzene	1.625				40.0
p-Isopropyltoluene	1.625				40.0
n-Propylbenzene	2.187	2.055			40.0
m+p-Ethyltoluene					40.0
o-Ethyltoluene					40.0
Methyl Acetate	0.993	0.974		1 7 9	40.0
Methyl cyclohexane	0.580	0.592	}	-2.1	
1,2-Dibromo-3-chloropropane	0.057	0.045		21.0	
Cyclohexene					40.0
1,2-Dichlorotrifluoroethane					40.0
n-Propanol	<u> </u>			1	40.0
3-Methyl-1-Pentyn-3-ol					40.0
Propylene Oxide				Ì	40.0
Ethanol	-			ļ	40.0
Chlorotrifluoroethane					40.0
Dichlorofluoromethane					40.0
Ethylene Oxide					40.0
Methyl Formate					40.0
Isobutyraldehyde					40.0
Amyl Acetate	<u></u>				40.0
1,2,3-Trichloropropane	0.152	0.143		5 9	40.0
Chlorodifluoromethane					40.0
1,3-Dichloropropane	0.777	0.751			40.0
Dibromomethane	0.359	0.317		11.7	
1-Propene					40.0
2-Chloropropane			ļ		40.0
1-Chloropropane					40.0
=======================================	=======	=======	======	1	====
					==

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VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd) METHOD 624

Instrument ID: VOAMS7

Calibration Date: 08/23/05 Time: 0653

Lab File ID: V83203

Init. Calib. Date(s): 08/16/05 08/16/05

Heated Purge: (Y/N) N

Init. Calib. Times: 1159 1343

COMPOUND	RRF	RRF20	MIN RRF	%D	MAX %D
1,2-Dichloroethane-d4 (SUR)_ Toluene-d8 (SUR)_ Bromofluorobenzene (SUR)	0.055 1.222 0.504			 -7.3 -1.1 -4.8	====

Surrogate Compound Recovery Summary

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY METHOD 624

Matrix: WATER Level: LOW Lab Job No: E050

SAMPLE NO. # # # # OUT SAMPLE NO. # # #		LAB	S1	S2		OWNER	Imam I
01 VV235B					S3 #	OTHER	TOT
01 VV235B 102 94 89 0 02 661886 98 93 92 0 03 661887 102 95 94 0 04 661888 100 96 92 0 05 661889 98 96 93 0 06 661891 103 91 90 0 07 661892 100 94 90 0 09 10 10 94 90 0 10 11 12 10 94 90 0 15 16 17 18 19 10			1				
02 661886 98 93 92 0 03 661887 102 95 94 0 04 661888 100 96 92 0 05 661889 98 96 93 0 06 661890 103 91 90 0 07 661891 101 92 89 0 08 661892 100 94 90 0 10 11 12 11	01	VV235B		. –	1	=	
03 661887 102 95 94 0 0 0 0 0 0 0 0 0							
04 661888 100 96 92 0 05 661889 98 96 93 0 06 661890 103 91 90 0 07 661891 101 92 89 0 08 661892 100 94 90 0 10 11 12 13 14 15 16 17 18 19 10	03					l ———	
05 661889 98 96 93 0 06 661890 103 91 90 0 07 661891 101 92 89 0 08 661892 100 94 90 0 10 11 12 13 14 15 16 17 18 19 10 18 19 10 <t< td=""><td></td><td>661888</td><td></td><td></td><td></td><td> </td><td></td></t<>		661888					
06 661890 103 91 90 0 07 661891 101 92 89 0 08 661892 100 94 90 0 10 11			98				
07 661891 101 92 89 0 0 09 10 10 11 12 13 14 15 16 17 18 19			103				
08 661892 100 94 90 0 10 11 12 13 14 15 16 17 18 19				92	89		
10		661892	100	94	90		
11							ĺ
12							
13							
14 —	12		·				
15							
16							
17 18 19 20 21 21 22 23 24 25 26 27 28 29							
18 19 20 21 22 23 24 25 26 27 28 29		+					
19					——		<u>—</u> 1
21							
22 23 24 25 26 27 28 29	20	***************************************					
23 24 25 26 27 28 29							
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25 26 27 28 29							
26 27 28 29							
27	25						
28 29 — — — — — — —	26						
29							
30							
30	29	<u></u>					
	30						

S1 = 1,2-Dichloroethane-d4 (69-131) S2 = Toluene-d8 (60-131) S3 = Bromofluorobenzene (67-128)

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D System Monitoring Compound diluted out

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Spike Recovery Summary

VOLATILE SPIKE RECOVERY SUMMARY METHOD 624

Matrix: WATER Matrix Spike - Lab Sample No.: 661824

Level: LOW MS Sample from Lab Job No: E037

QA Batch: 9297

	MS	D.C.	
	MS %	BS	
Compound	_	8	
	REC.	REC.	LIMITS
Chloromethane	=======	=======	=======
Bromomethane	86	95	0-273
	85	95	0-242
Vinyl Chloride Chloroethane	82	95	0-251
	86	95	14-230
Methylene Chloride	79	85	0-221
Trichlorofluoromethane	60	90	17-181
1,1-Dichloroethene	73	80	0-234
1,1-Dichloroethane	74	80	59-155
trans-1,2-Dichloroethene	71	75	54-156
Chloroform	77	85	51-138
1,2-Dichloroethane	79	80	49-155
1,1,1-Trichloroethane	72	75	52-162
Carbon Tetrachloride	73	80	70-140
Bromodichloromethane	80	80	35-155
1,2-Dichloropropane	83	85	0-210
cis-1,3-Dichloropropene	71	75	0-227
Trichloroethene	83	90	71-157
Dibromochloromethane	80	85	53-149
1,1,2-Trichloroethane	93	90	52-150
Benzene	84	85	37-151
trans-1,3-Dichloropropene	69	75	17-183
2-Chloroethyl Vinyl Ether	o í	70	0-305
Bromoform	77	85	45-169
Tetrachloroethene	86	90	64-148
1,1,2,2-Tetrachloroethane	91	80	46-157
Toluene	85	90	47-150
Chlorobenzene	90	90	37-160
Ethylbenzene	86	90	37-162
1,3-Dichlorobenzene	89	95	59-156
1,4-Dichlorobenzene	93	90	18-190
		-~	10-190
	l		

^{*} Values outside of QC limits

VOLATILE SPIKE RECOVERY SUMMARY METHOD 624

Matrix: WATER

Matrix Spike - Lab Sample No.: 661824

Level: LOW

MS Sample from Lab Job No: E037

QA Batch: 9297

Compound	MS % REC.	BS % REC.	LIMITS
1,2-Dichlorobenzene	93	95	18-190

^{*} Values outside of QC limits

Spike Recovery: 0 out of 62 outside limits

COMMENTS:	

Internal Standard Area and RT Summary

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): V83203 Date Analyzed: 08/23/05

Instrument ID: VOAMS7 Time Analyzed: 0653

	,	7.00 (D.01-)	·				
		IS1(BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	=======================================	=======	======	========	======	=======	======
	12 HOUR STD	357852	7.14	1598878	8.35	1145102	11.71
	UPPER LIMIT	715704	7.64	3197756	8.85	2290204	12.21
	LOWER LIMIT	178926	6.64	799439	7.85	572551	11.21
	========	=======	======	========	======	=======	======
	LABORATORY						
	SAMPLE NO.						
	========	========	======	========	======	=======	===
01	VV235B	364406	7.15	1602362	8.35	1187549	11.72
02	661886	389355	7.15	1720850	8.36	1263625	11.72
03	661887	375622	7.14	1632629	8.35	1184506	11.72
04	661888	364506	7.15	1629747	8.35	1182088	11.71
05	661889	372204	7.14	1599692	8.34	1172540	11.71
06	661890	369391	7.14	1594389	8.34	1175872	11.71
07	661891	359438	7.15	1569891	8.35	1181847	
08	661892	356069	7.15	1578618	8.35		11.71
09		10000	,.15	1370016	0.35	1165797	11.71
10							
11							
12							
13						- <u>-</u> -	
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						-	
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = - 50% of internal standard area RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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This is the Last Page of the Document